













Carnegie Mellon University Qatar



Acknowledgments

In 2004, Carnegie Mellon and Qatar Foundation began a partnership to deliver select programs that will contribute to the long-term development of Qatar. For nearly two decades, we have shared a mission: to provide a world-class education to students in Qatar.

Carnegie Mellon University in Qatar thanks **His Highness Sheikh Tamim Bin Hamad Al Thani**, Amir of the State of Qatar, for his leadership and commitment to progress and education.

We also express our deep appreciation to **His Highness the Father Amir Sheikh Hamad Bin Khalifa Al Thani, Her Highness Sheikha Moza bint Nasser**, Chairperson of Qatar Foundation, and **Her Excellency Sheikha Hind bint Hamad Al Thani**, Vice Chairperson and CEO of Qatar Foundation, for their vision and leadership.



Annual Report 2023–2024



Table of Contents

Introduction

We are Carnegie Mellon	5
From the President	7
From the Dean	9
Our Alumni	11
Class of 2024	12
The Global Alumni Network	14
Achievement and Impact	16
Alumni Connections	18
Our Students	21
Our Student Community	22
The Admission Process	24
Academics	27
Academics at CMU-Q	28
Faculty	30
Biological Sciences	32
Business Administration	34
Computer Science	36
Information Systems	38
Arts and Sciences	40
Academic Resource Center	42
Library	43
Community Engagement	45

Collaborations with Oatar Foundation 46

	40
Community Partners	50
Hamad Bin Jassim Center	52
Qatar Investment Authority Center	54
Carnegie Mellon Connections	
Diversity, Equity, Inclusion, Belonging	58

Student Experience	61
A Strong, Connected Community	62
Personal Growth and Development	64
Leadership and Career Readiness	66
Research and Innovation	69
The Year in Faculty Research	70
Focus on Al	72
Focus on Sustainability	74
Student Research	76
Meeting of the Minds	78
Our Stories	81
Marketing and Public Relations	82
The Year in the News	84
Leadership, Faculty,	
and Partners	89
Advisory and Leadership	90
Faculty Members	92
Community Partners	94
About Carpogia Mollon	
About Carnegie Mellon University in Qatar	



We are Carnegie Mellon

Our Vision

Carnegie Mellon University will have a transformative impact on society through continual innovation in education, research, creativity and entrepreneurship.

Our Mission

To create a transformative educational experience for students focused on deep disciplinary knowledge; problem-solving; leadership, communication and interpersonal skills; and personal health and well-being.

To cultivate a transformative university community committed to:

- a. attracting and retaining diverse, world-class talent;
- c. ensuring individuals can achieve their full potential.

To impact society in a transformative way—regionally, nationally and globally—by engaging with partners outside the traditional borders of the university campus.

Remembering Jared L. Cohon

Jared L. Cohon, the eighth president of Carnegie Mellon University, passed away in March 2024. Dr. Cohon was a visionary leader who believed that Carnegie Mellon's culture of collaboration could extend beyond its Pittsburgh campus. He embraced the vision for Education City, and under his leadership, CMU-Q became Carnegie Mellon's first international undergraduate campus.

b. creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation and entrepreneurship can flourish; and





From the President

For the last 20 years, Carnegie Mellon University in Qatar has helped to advance the university's globally inclusive mission to create and leverage knowledge for society's gain.

Today, this mission continues: CMU-Q trains some of the world's greatest talents, with a student population spanning more than 450 students from 61 countries. Their areas of study—biological sciences, business administration, computer science, and information systems—will position these students to excel as global leaders and citizens in today's information-based economy.

The events and accomplishments that CMU-Q recorded over the most recent academic year are a testament to this momentum and outlined in the pages that follow. Some of the year's many highlights include:

- campus, or in the Washington Semester Program
- .
- Initiating Meaningful Pittsburgh and Qatar Ties
- offerings
- Tartans worldwide

These milestones—and CMU's overall success in Qatar—is only possible thanks to the steadfast support of the Qatar Foundation. CMU remains deeply grateful for the founding vision and partnership of His Highness the Father Amir Sheikh Hamad Bin Khalifa Al Thani, Her Highness Sheikha Moza bint Nasser, and Her Excellency Sheikha Hind bint Hamad Al Thani.

I hope that you enjoy learning more about our CMU-Q community in this annual report, and that this review leaves you inspired and in awe of all that we have accomplished together. I am excited to build on this incredible foundation and see how CMU-Q will continue to contribute to our global Carnegie Mellon community in the year to come.

Farnam Jahanian

President, Carnegie Mellon University

Taking their learning abroad, with 84 CMU-Q students spending a semester on our Pittsburgh

Continuing important initiatives like the Technology Consulting in the Global Community program

Making the most of spring break, with students from two campuses participating in IMPAQT:

• Hosting micro courses, which allow CMU-Q students to engage in topics—including building Al products, health psychology, and art and design—that fall outside their standard course

• Celebrating the academic accomplishments of 120 members of the Class of 2024—our largest graduating class yet—and growing the total number of CMU-Q alumni to more than 1,300



From the Dean

Welcome to Carnegie Mellon University in Qatar's Annual Report, 2023-24.

This past year was a milestone for CMU-Q: it was the 20th year that our campus has been open. As I reflect on the achievements of last year, I am filled with a profound sense of gratitude and pride for the incredible community we have created over the past two decades. From a small startup campus with only 41 students, we have grown into a multifaceted community of learners, experts, innovators and creators.

Within the *Annual Report 2023-24*, you will find our key accomplishments and achievements throughout the year. Our students, alumni, faculty and staff have made a tremendous impact over the last year, finding success both within the university and in the wider community. As our alumni network continues to grow, this impact will only continue to expand and become more profound.

The 20th year milestone is also an opportunity to look to the future. Our faculty members are an amazing source of expertise and innovation. Across all disciplines, they are finding new ways to enhance learning in the era of artificial intelligence. They use their knowledge to investigate the many facets of equity and sustainability. They prepare their students to be adaptable and to reach across disciplines to find unique solutions to the questions that face the world.

CMU-Q thrives because of the continued partnership between Carnegie Mellon and Qatar Foundation. We are grounded by the core mission of the global Carnegie Mellon community: to have a transformative impact on the world through education and research. We are inspired by Qatar Foundation and the partner universities in Education City, who share the vision of the transformative effect of education on individuals, communities, and societies. This collaboration continues to deepen, and I am excited to see how it develops over the next decades.

I invite you to explore the milestones of the last year and learn more about how CMU-Q is shaping the future through education, research, and innovation.

Michael Trick

Dean, Carnegie Mellon University in Qatar



Our Alumni

For each student, graduation marks the end of the undergraduate journey and the start of a new era within the Carnegie Mellon alumni network.

Class of 2024

In May, the CMU-Q community celebrated the graduation of our largest class in campus history.



"On behalf of everyone at Carnegie Mellon, I wish you continual learning, supportive communities, friendship, and creativity, no matter where your path takes you."

Dean Michael Trick

Graduates by program



Business Administration: 48







Computer Science: 14

Information Systems: 40





"As a hub of knowledge, innovation and discovery, CMU in Qatar is preparing students to be global leaders and citizens in today's rapidly changing world. This work and this campus are sources of great pride for CMU."

President Farnam Jahanian



Awards and recognition

During the ceremony, several graduates are recognized for their outstanding academic performance, service and leadership.

Student Speaker

- Abdulrahman Darwish Fakhroo
- Arabic Poem Reader
- Diram Tabaa

Andrew Carnegie Scholars

- Ahmad Alhallag
- Ulan Seitkaliyev

Qatar Campus Scholars

- Ahmad Alhallag Yahya Elkhatib
 - Amiko Gogitidze
- Ulan Seitkaliyev

12 Our Alumni

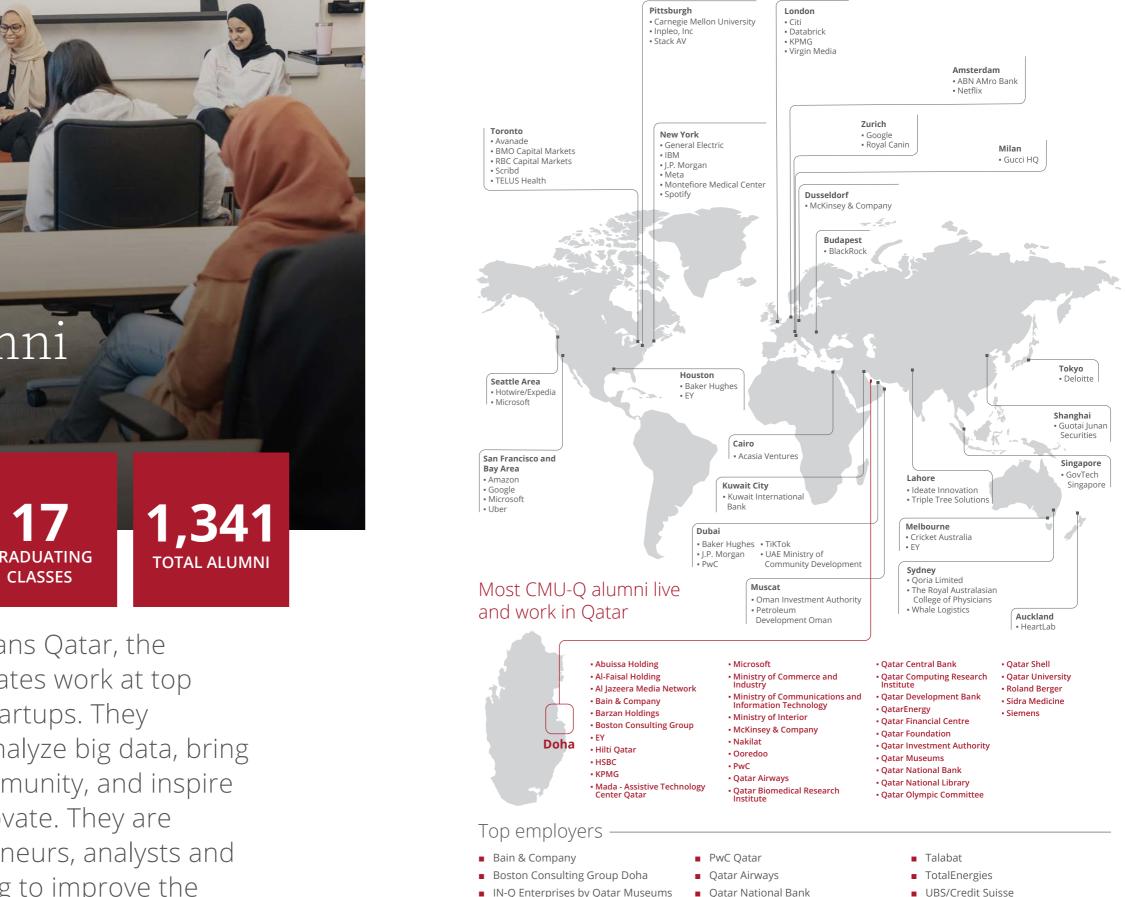
"As we stand today on the edge of our future, I am reminded of the falcons and their journey from birth to ascension to the vast sky, and how that journey mirrors our own at Carnegie Mellon."

Abdulrahman Darwish Fakhroo Class of 2024 Student Speaker

Outstanding Academic Achievement Awards

- Adel Fergatova (Biological Sciences)
- Sweety Devnani (Business Administration)
- Ulan Seitkaliyev (Computer Science)
- Diram Tabaa (Computer Science)
- Huda Baig (Information Systems)

Alumni are working around the world



- IN-Q Enterprises by Qatar Museums Ministry of Interior
- Nakilat

- Snoonu
- State Audit Bureau

The Global Alumni Network



The CMU-Q alumni network spans Qatar, the region, and beyond. Our graduates work at top organizations and innovative startups. They influence government policy, analyze big data, bring culture and the arts to the community, and inspire young people to learn and innovate. They are researchers, creators, entrepreneurs, analysts and educators, and they are working to improve the world around them.

Achievement and Impact

In Qatar and around the world, CMU-Q alumni are making an impact.

Qatar Museums leadership

Sheikha Amna bint Abdulaziz Al Thani (BA 2008) was appointed Chief of Museum and Heritage Development at Qatar Museums.

Forbes Middle East 30 Under 30

Sanjeet Sahni (BA 2017) made the Forbes Middle East "30 Under 30" list for 2023. Sahni is co-founder of Swing Capital, a venture capital firm that helps entrepreneurs in the sports, media, and lifestyle sectors.

Winner, Three Minute Thesis

Maher Khan (CS 2017 and IS 2017) won first place in the Three Minute Thesis school-level competition at University of Pittsburgh School of Computing and Information. His research delved into the world of intrusion tolerance in distributed systems.

Tartans on the Rise 2024

Musab Popatia (CS 2016), Rukhsar Neyaz (CS 2015), and Sabih Bin Wasi (CS 2015) were recognized by Carnegie Mellon on the Tartans on the Rise list of notable alumni for 2024. The three alums created Stellic, a degree management tool now used in 70 colleges and universities worldwide.







UNESCO advisory committee

Nasser Al-Khori (BA 2012) was appointed to the first advisory committee of the UNESCO Chair on Governance and Social Responsibility in Sport. Al-Khori is the executive director of Generation Amazing Foundation, an initiative that uses football as a catalyst for social change, education and empowerment.



2023 IMPART Artist Grant Exhibition

Farjana Salahuddin (IS 2017) was selected for the IMPART Artists Grant Exhibition. Her art installations explored the intersection between technology and the arts.

Cricket World Cup champion

Urmila Rosario (BA 2010) managed the Australian team that won the ICC Men's Cricket World Cup. Rosario also manages the Australian women's cricket team.



Apple Scholar

Omar Khattab (CS 2019) was named an Apple Scholar in artificial intelligence/machine learning. Khattab is completing his PhD at Stanford University

Gold medal, Seoul International Invention Fair

Mohammed Al-Qassabi (IS 2022) won four awards at the Seoul International Invention Fair (SIIF) 2023, including the gold medal, the best invention award by the Korea Institute of Patent Information, the Singapore innovation award, and

Alumni Connections

CMU-Q graduates maintain a strong connection to the university, and to Education City, sharing their experiences with students and making new connections in the alumni community.





CMUniverse

CMU-Q introduced the campus to CMUniverse, a mentoring platform to connect students and new graduates with alumni around the world.

Alumni-faculty gathering

Dozens of alumni gathered to reconnect with former faculty members Alex Wilcox Cheek (CFA 2009) and Crista Crittenden (DC 2013), who are themselves CMU alumni.



Summer College Preview Program

Ward Ayan (CS 2023), Zenab Siddig (BS 2021), Dina Abdelazeem (BA 2021) and **Đorđe Popović** (CS 2022) served as course instructors for the 2023 Summer College Preview Program for high school students.



Our Students

Our student community is at the heart of everything we do at Carnegie Mellon University in Qatar. During the admission cycle each year, we seek out applicants who are motivated and eager to learn. Together, our enrolled students form a global-minded community that is enthusiastic, encouraging and supportive.

Our Student Community

CMU-Q students come from remarkably diverse backgrounds, and they possess a wide spectrum of interests, talents and aspirations. Together they form a vibrant and supportive learning community.

119

FIRST-YEAR

STUDENTS

61

NATIONS REPRESENTED

France

Georgia

Ghana

Indonesia

India

Iran

Irag

Italy

Jordan

Kenya

Kuwait

Kazakhstan

Kyrgyzstan

472

STUDENTS

ENROLLED

Algeria Australia Azerbaijan Bahrain Bangladesh Brazil **Belarus** Canada China Côte D'Ivoire Dominica Egypt Ethiopia

Libya
Malaysia
Mexico
Mongolia
Morocco
Myanmar
Nepal
Netherlands
Nigeria
Oman
Pakistan
Palestine

Lebanon

Philippines Poland Qatar Romania Russia Rwanda Senegal Somalia South Africa South Korea Sri Lanka Sudan

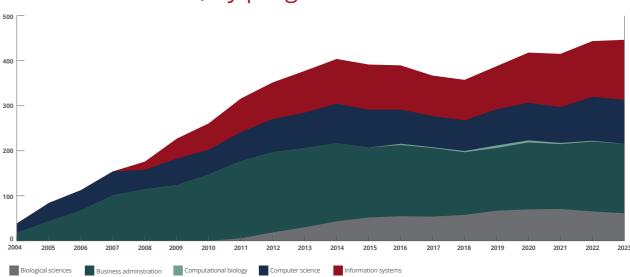
Syria

Tajikistan Tanzania Tunisia Turkey Turkmenistan United Kingdom United States of America Uzbekistan Vietnam

38% 57%

FEMALE

QATARI CITIZENS



Financial aid

Financial aid options are essential in building a diverse, competitive and strong CMU-Q community.

Financial support options

- Amiri scholarship, Ministry of Education and Higher Education
- Sponsorship from a national organization
- Qatar Foundation need-based grant
- Qatar Foundation financial aid

Organizations that sponsored CMU-Q students

- Alfardan Group
- Amiri Diwan
- Aspire Zone
- ExxonMobil
- Kuwait Embassy
- Ministry of Education and Higher Education

22 Our Students



Students enrolled, by program

- Qatar Foundation scholarship
- Carnegie Mellon University in Qatar scholarship
- FAFSA loans for U.S. citizens
- Ministry of Interior
- Ooredoo
- Qatar Airways
- Qatar Armed Forces
- Qatar Central Bank
- QatarEnergy
- Qatar Foundation
- Qatar National Bank

The Admission Process

Each applicant to CMU-Q is considered holistically: we look for academic excellence, special interests, leadership qualities, and a motivation to learn. Through this process, we select a diverse, talented group of students each year who will support and challenge one another.

Welcoming the Class of 2027

The Class of 2027 includes 119 students who were officially welcomed to the university at a formal convocation ceremony. The ceremony capped off a week of orientation activities for the new students to learn about the people and resources at CMU-Q.





Recruiting the Class of 2028

Application numbers rose by 18% to a record high, with more than 2,800 students applying for 115 spaces in the first-year class. The admitted class includes many students who have won notable national awards, and many are among the very best students in their respective countries.

Pre-college opportunities

Throughout the year, CMU-Q offers opportunities to high school students to explore the disciplines we teach. In the summer, students learn about university life during the three-week Summer College Preview Program. Once each semester, students can take a one-day workshop to explore our programs.

For many of these students, pre-college programs lead to an interest in biological sciences, business administration, computer science, information systems, or mathematics, and many go on to attend CMU-Q as undergraduates.

Opportunities for high school students

- Alice Programming Competition
- BioTechnology Explorer Program
- Experience CMU-Q
- LifeLines Hackathon
- MindCraft Alpha
- MindCraft Camps
- Pi Day Mathematics Competition
- Qatar Collegiate Programming Competition
- QF Math Circle
- Summer College Preview Program

119 **STUDENTS**

50 **QATARI CITIZENS**

61

NATIONALITIES

2400+

APPLICATIONS





range (start, stor range (2, 12, 2)(2, 4, 6, 8, 10)

Start, start + step, s ... start +

Academics

The Carnegie Mellon approach to education supports and challenges students throughout their undergraduate years. We prepare students to solve creatively, think analytically, create value thoughtfully and make decisions ethically.

ploop variable

in (sequence):

range (5 60,1,2,3

Academics at CMU-Q

At Carnegie Mellon, students begin with a broad introduction to their major and a foundation in the arts and sciences. In their middle semesters, students focus on major core classes, and they deepen their understanding in the last semesters through advanced electives.

302 courses offered over 3 semesters



New AI+X certificate

CMU-Q introduced the first AI+X certificate to encourage students to apply artificial intelligence fundamentals within different disciplines. The certificate combines foundational courses in AI and a second discipline, culminating in a capstone project. The AI+Finance certificate was the first to launch in Spring 2024.

Pilot of Core@CM

In Fall 2023, the Qatar campus piloted the new Core@CM course that will be rolled out to all Carnegie Mellon first year students in 2024. The course is part of CMU's Core Competencies initiative to develop student skills in communication and presentation, collaboration and teamwork, information and data literacy, and intercultural and global learning.

Summer experiential learning

During the summer of 2023, global learning opportunities provided 30 students with immersive experiences to learn languages, acquire entrepreneurial and consulting skills, or engage in research experiences.

- Technology Consulting in the Global Community (TCinGC) in Palau, India and Ghana
- Language summer programs in Jordan, Spain, Costa Rica, and China
- European Innovation Academy in Portugal
- Mellon College Summer Research Institute in Pittsburgh





Faculty

CMU-Q faculty members are educators, researchers, and experts in their fields. They provide individualized attention and focused instruction so all students can reach their potential.

Number of faculty





New faculty members

Jocelyn Bélanger Associate Teaching Professor, Psychology

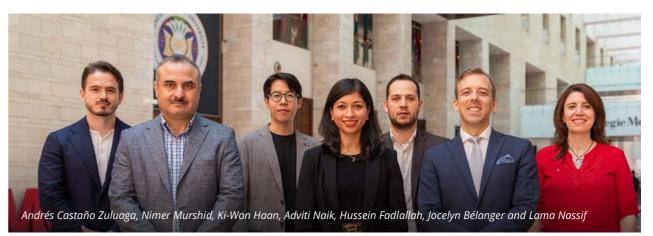
Andrés Castaño Zuluaga Assistant Teaching Professor, Economics and Analytics

Crista Crittenden Instructor. Psychology

Hussein Fadlallah Management

Ki-Won Haan Assistant Teaching Professor, Organizational Behavior

Nimer Murshid Assistant Teaching Professor, Chemistry



Leadership appointments Effective July 1, 2023

Khaled Harras Senior Associate Dean, Faculty

Jennifer Bruder Associate Dean, Research

Kira Dreher Associate Dean, Diversity, Equity, Inclusion, and Belonging (DEIB)

Giselle Reis Area Head, Computer Science

Ryan Riley Associate Area Head, Computer Science

Emeriti faculty

Three long-serving faculty members were conferred CMU emerit status upon their retirement in spring 2024: Susan Hagan, Marion Oliver and Daniel Phelps.





Assistant Teaching Professor,

Adviti Naik Assistant Teaching Professor, **Biological Sciences**

Lama Nassif Associate Teaching Professor, Arabic Studies

Academic promotions Effective July 1, 2024

Nesrine Affara Associate Teaching Professor, Biological Sciences

Gianni Di Caro Teaching Professor, Computer Science

María Pía Gómez-Laich Associate Teaching Professor, English

Ihab Younis Teaching Professor, Biological Sciences





Biological Sciences

Biological sciences students at CMU-Q do more than study science: they learn to follow their curiosity, explore hypotheses, and contribute in a meaningful way as young scientists and researchers.



Frontiers in Immunology article

Senior student Adel Fergatova published an in-depth review of how cancer cells and fibroblasts interact within the tumor microenvironment, a project that was advised by Nesrine Affara. The article was published by Frontiers in Immunology, a leading international peer-reviewed journal.





Two graduating seniors, Hana Hasna and Fiza Tarlochan, presented their research findings at the UK Interdisciplinary Breast Cancer Symposium. Hasna and Tarlochan were the only two undergraduates with posters accepted to the biennial conference. Ihab Younis served as faculty advisor for both projects.

Sidra Young Scientist Symposium

Aziza Abugaliyeva, Nada Alnajar, and Mariam Elmeragawi presented their summer research at Sidra Medicine's Young Scientists Symposium. The students used computational biology to identify disease biomarkers. Abugaliyeva went on to publish her work in Brain Disorders. Saad Rasool (BS 2018) served as advisor.

GAITAR Fellowship

Nimer Murshid received a GAITAR Fellowship to investigate if Generative AI tools can deepen learning in an elective chemistry course for non-majors. The Generative Artificial Intelligence Teaching as Research Initiative measures the impacts of these tools on educational experiences at CMU.

Wimmer Faculty Fellowship

Adviti Naik is developing a new advanced elective course in precision medicine. Naik was selected as a Wimmer Faculty Fellow for 2024-25, and will design the course with support from CMU. She is the third Wimmer Faculty Fellow from the Qatar campus.



Peer Observation Program

Faculty members launched the Peer Observation Program to enhance teaching practice and foster a culture of collaboration. With guidance from CMU's Eberly Center, the team worked together to provide constructive feedback on teaching, classroom materials and visual aids.

Summer Research Institute

Madina Kunakbaeva, Zhansava Matkenova and lemal Velihanova participated in the Summer Research Institute at CMU. The program takes place over nine weeks, with students conducting research in molecular biology and biochemistry.





Business Administration

Business administration students at CMU-Q learn quantitative decision-making, our pioneering approach to undergraduate business education. With an emphasis on analytics and leadership development, students are prepared for the challenges of the global business landscape.



Case writing and teaching workshop

Glenn Rowe, professor emeritus at the Ivey Business School, delivered a three-day workshop on case writing and case teaching to members of staff and faculty. Business cases are educational tools that encourage students to analyze and solve real-world problems related to coursework.





New region-specific courses

CMU-Q introduced three new business administration courses that were developed specifically for the Gulf region. Beginning in the spring 2024 semester, CMU-Q offered Islamic finance, Islamic economics, and innovation and entrepreneurship in emerging markets.

Global STEM Education Alliance Symposium

Graduating senior Mary Effie Akinyi attended the 2023 mEducation Alliance Symposium. Akinyi was invited to attend by mEducation Alliance, the non-profit organization where she interned during CMU's Washington Semester Program



Business administration alumna Marwa Zouzou (BA 2016) joined Ki-Won Haan's class, Managing Across Cultures, to discuss their experiences in diverse workplaces.

Quantitative Quest Qatar

CMU-Q hosted a data analytics competition for university students. Participants from five universities developed predictive models for a dataset. The finalists presented their models to a panel of faculty judges. Sameer Mathur was the lead organizer of the event.

Singapore Week of Innovation and Technology

A startup co-founded by student Mukhammadjon Gafurov was selected to join the Qatar delegation at the Singapore Week of Innovation and Technology (SWITCH) 2023. At the event, Gafurov showcased eyeTech, an AI-powered eyetracker that helps medical professionals improve their diagnostic skills.

Innovation Scholars

Ekaterina Demenkova, a rising junior, was named Innovation Scholar by the Swartz Center for Entrepreneurship at the CMU Pittsburgh campus. The two-year program is completed in conjunction with the participants' regular studies.

Patent Innovation Award

Diala Budeir, a business administration senior, received the Patent Innovation Award at the European Innovation Academy in Portugal. Budeir's team developed an idea for a language learning app that uses a gaming approach to conversational speech.

Computer Science

Computer science students at CMU-Q learn both the theoretical foundations and the practical knowledge to push the frontiers of the field and make a real-world impact.



A. Nico Habermann Distinguished Lectures in Computer Science

Distinguished lectures in computer science are named in honor of A. Nico Habermann, founding dean of the School of Computer Science. Two of these distinguished lectures took place during the year.





First team from Qatar to advance to ICPC finals

ie Mellon

Andrey Genze, Ulan Seitkaliyev and Gulnaz Serikbay made history by becoming the first team representing Qatar to advance to the world championship of the International Collegiate Programming Competition. The team's showing at the Arab-Africa regional competition places them among the top 1% of competitive programmers in the world.

International publications

Students Thang Bui-Nguyen and Temoor Tanveer published three research papers in international journals, including the IEEE Internet of Things Journal, during the academic year. The students worked for more than two years on a novel, realistic, open-source testbed for federated learning. All three papers were co-authored by Hend Gedawy and Khaled Harras.

Amazon OpenSearch

Raman Saparkhan, a computer science junior, was an invited speaker at the inaugural Amazon OpenSearchCon 2023 in Seattle, U.S.A. Saparkhan worked as a contributor to OpenSearch, a community-driven, open-source search and analytics suite.

Entrepreneurship for **Computer Science**

In a new course, Mohammad Hammoud challenged students to explore entrepreneurship through a computer science lens. Students presented their prototypes at a final showcase, judged by industry experts and faculty members. Mugur Preda and Raman Saparkhan placed first in the showcase with HealthBook, an idea to revolutionize the way health records are shared



Qatar Collegiate Programming Competition

CMU-Q hosted the largest QCPC competition in history, which drew more than 200 students on 35 university-level teams and 29 high school teams. The winning team included CMU-Q students Andrey Genze, Ulan Seitkaliyev, and Gulnaz Serikbay.





Information Systems

Information systems students learn to design, deliver, and use information and communication technologies to solve problems for companies, governments, and society.



Mark S. Kamlet Distinguished Lecture in Information Systems

The Mark S. Kamlet Distinguished Lecture in Information Systems is named after Mark S. Kamlet, who is Provost Emeritus at Carnegie Mellon University.



Nursing informatics

Daniel Phelps delivered a webinar to 645 participants on the topic of basic study design in health informatics. The session was part of the Nursing Informatics Research Education Webinar at Hamad Medical Corporation.

Alumni advisors

Yusuf Musleh (CS 2016), Muhammad Ali Najeeb Qazi (IS 2017), Farjana Salahuddin (IS 2017), Sirat Farhin (IS 2017), and Zuhair Mohammad (IS 2016) served as adjunct advisors for the information systems consulting project course in Spring 2024.



Women and digital entrepreneurship in Qatar

Nui Vatanasakdakul adapted a course in e-business and design thinking for the year-long Provost's Inclusive Teaching Fellowship. Vatanasakdakul encouraged students to explore how in Qatar, female entrepreneurs face different challenges than their male counterparts.



GAITAR Fellowship

Houda Bouamor is part of a CMU team investigating if generative AI tools affect equity in student outcomes. The Generative Artificial Intelligence Teaching as Research (GAITAR) Initiative measures the impacts of Generative AI tools on students' learning and educational experiences at CMU.

Conference on Empirical Methods in Natural Language Processing

Houda Bouamor served as a key organizer for the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP2023), an event that drew about 4000 world global experts in the area of Natural Language Processing, a subfield of artificial intelligence.



Provost's Inclusive **Teaching Fellowship**

Mohammad Aazam was awarded a Provost's Inclusive Teaching Fellowship to adapt a course in the 2024-25 academic year. Sponsored by the provost and administered by the Eberly Center, this program aims to enhance diversity, equity, and inclusion in CMU courses.



Arts and Sciences

Students in all majors learn to draw connections and work effectively outside their majors through study in the arts and sciences. Courses span the disciplines of Arabic studies, English, French, history, library sciences, mathematics, philosophy, physics, psychology, Spanish, and statistics.



Pi Day Mathematics Competition

The 2024 Pi Day Mathematics Competition, organized by Zelealem Yilma and the mathematics faculty of CMU-Q, included more than 300 high school students from 85 government and private Qatar high schools. Teams from DPS Modern Indian School took the top spot in the final round.





CMU-Q hosted the Integration Bee, a competition for university students who are interested in celebrating excellence in mathematics. The event was created and organized by Layan El Hajj, and faculty members at CMU-Q, Hamad Bin Khalifa University, Qatar University and Texas A&M University at Qatar wrote questions, and served as judges.

Georgetown University in Qatar workshop

Pía Gómez-Laich, Thomas Mitchell and Silvia Pessoa delivered a workshop on tools for effective argument writing to the CIRS Undergraduate Research Advancement at Georgetown University in Qatar.



Python software for longitudinal Google Trends

Taeyong Park published the software :pytrends longitudinal: a Python package for generating longitudinal Google Trends data. The package is published on Python Package Index (PyPI), a repository of software for the Python programming language.

Knowledge Talk, Dubai

Dudley Reynolds delivered an invited talk at the Knowledge Summit in Dubai. Reynolds spoke about knowledge cities and how the multiversity context enhances both learning and research.

Arts and Sciences **Undergraduate Exhibition**

Students showcased 25 projects from arts and sciences courses in a digital exhibition for the CMU-Q community. The event is co-chaired by Kira Dreher and Silvia Pessoa to highlight the important scholarly work students create in these courses.

Academic Resource Center

The ARC provides students with the support, resources and opportunities to improve learning and succeed academically.



Consultations with students

The ARC offers consultations for students who have questions about course material or wish to challenge themselves academically. There were more than 1750 consultation visits during the academic year.

StuCo Program

The Student-taught Courses program is an opportunity for students to design and deliver a unique course to their peers. Students receive guidance on course design, syllabus writing and teaching. This year, students delivered courses in seven topics, including 3D modeling and rendering, and natural language processing ethics.

Tutor Connect Series

PRISEAL conference presentation

Sheren Saad presented her work on the struggles facing Gazan scholars and scientists at the Publishing Research Internationally: Issues for Speakers of English as an Additional Language conference (PRISEAL). Saad was also the recipient of the Outstanding Academic Support award for 2023-24.

Outstanding Course Assistant award

The 2023-24 Outstanding Courses Assistant award recipient was Ulan Seitkaliyev. The award recognizes exceptional commitment to tutoring undergraduate students.

The ARC collaborated with Texas A&M University at Qatar to enhance the skills of student tutors. The training series provided a platform for sharing knowledge, hearing diverse perspectives, and gaining a deeper understanding of core tutoring topics.

Library

The CMU-Q Library supports the academic and research programs at the Qatar campus. Students, faculty and staff have access to a large collection of databases, ejournals and ebooks, as well as print resources.



Fostering Open Science

Sayeed Choudhury, associate dean for digital infrastructure at CMU Pittsburgh, shared the latest news from the CMU Open Source Programs Office. The OSPO raises awareness and capacity for open source software to better develop, manage, curate, and share information.

Cyanotype techniques workshop

Tatiana Usova and Reya Saliba held a workshop for the Dylan Vitone, an associate professor at CMU's School of CMU-Q community to provide guidance in the power and Design, provided a hands-on workshop on the cyanotype pitfalls of generative AI tools. The workshop delved into process, a type of photographic printing that produces a engaging with generative AI in an effective and responsible monochromatic image in shades of blue by using the sun way. as a light source.

Author talk

Suzanne Hassan Hammad, the author of Emplaced Resistances in Occupied Palestine, shared her insights into everyday life and struggles of the Palestinian people.

Research communication workshop

Nicky Agate, associate dean for academic engagement at the Pittsburgh campus, presented strategies for communicating research to different audiences. The discussion provided guidance for students and faculty conducting research.

Generative AI workshop



Community Engagement

Our community begins with the Carnegie Mellon network of faculty, staff, students and alumni all over the world. We also have strong, living connections with Qatar Foundation, our strategic partners, and the wider Qatar community. Engaging with leaders, experts, and students in the community offers rich learning opportunities, and contributes to the development of Qatar.

Collaborations with Qatar Foundation

We are close partners of Qatar Foundation, and each day our students, faculty, alumni and staff work with entities across Education City to build a hub of learning, cooperation and discovery.

OF Excellence award

At the Qatar Foundation Convocation ceremony, Her Highness Sheikha Moza bint Nasser presented the QF Excellence award to two graduates from the CMU-Q Class of 2024. Muneera Al-Baker and Yahya Elkhatib were among just 16 graduating students who received the award.





QF Alumni

CMU-Q graduates are active in the QF alumni network. Highlights include Asma Al-Kuwari (BA 2011), who moderated a panel discussion of Education City alumni at this year's QF Alumni Forum, and Yasser Khan (IS 2011) who discussed the future of social media at a QF Alumni Talk.



US Arabic Debates Championship finals

A student team of Ahmad Alhallaq, Moamin Ibrahim and **Diram Tabaa** reached the finals at the United States Arabic Debates Championship, an outreach initiative by Qatar Debate. About 150 debaters from 40 universities competed at the event.





OF Math Circle

Michael Trick shared his passion for scheduling and optimization at QF Math Circle. Now in its second year, Math Circle now offers more than 50 high school students a weekly after-school exploration of math concepts, taught by faculty members from CMU-Q, Hamad Bin Khalifa University, Texas A&M University at Qatar, VCUarts Qatar, and Weill Cornell Medicine-Qatar.

Asma Al-Kuwar





QF Convocation

CONVOCATION 2024

Collaborations with Qatar Foundation

CMULead in Qatar

CMU-Q hosted the first CMULead in Qatar, a professional development leadership program created at the Pittsburgh campus. Sessions were delivered by CMU human resources specialists and included participants from CMU Africa, CMU-Q, Hamad Bin Khalifa University, QF, VCUArts Qatar and Weill Cornell Medicine-Qatar.



Qatar Teaching and Learning Forum's Badir

Thomas Mitchell was an organizer of Badir, an event hosted by the Qatar Teaching and Learning Forum to build multiversity connections, share ideas about teaching and learning, and imagine the future of Education City. Mitchell, along with Agustín Indaco and Jennifer Bruder, led roundtable discussions and several other faculty members and students attended the event.

Study Abroad in Qatar

In the spring semester, CMU-Q hosted four exchange students from the American University of Beirut. The students were part of the new program, Study Abroad in Qatar, which is a collaboration between Education Above All (EAA) Foundation and QF.



Iman Adeinat delivered a research talk to the Education City community titled "Empowering women from segregation: Journey of women in higher education in Saudi Arabia." The event was organized by Women Leaders in Higher Education and supported by the DEIB office at CMU-Q.

Second Multiversity Symposium in Education City

Experts from CMU-Q were an integral part of the Second Multiversity Symposium, including Anthony Weston on the QF Math Circle panel, Jeffrey Squires, Dudley Reynolds and Hope Rodefer on the AI+X session, and Dudley Reynolds on the logistical challenges of managing collaborations panel.

Education City Marhaba

Michael Trick moderated a panel at the Marhaba event for Education City students. The event welcomed new students from all of the partner universities, and showcased the many opportunities within Education City.



Research talk on women in higher education

Community Partners

We are proud to have strong, collaborative relationships within the Qatar community. Each year, we strive to strengthen these connections, and we seek out new partnerships with entities that share our vision of the transformative impact of education.

Dean's Lecture Series

The Dean's Lecture Series is a forum for prominent industry leaders, government officials and members of the business community to share their expertise on topical issues. The series has hosted some of the most influential thinkers in Qatar.



The role of businesswomen in community development Aisha Hussein Alfardan Vice-Chairwoman Qatari Businesswomen Association



Education and innovation strategy in developing countries

Fahad Al-Sulaiti Chief Executive Officer Education Above All (EAA) Foundation



QNB corporate strategy Abdulla Mubarak Al-Khalifa Group CEO Qatar National Bank (QNB)



The role of telecommunications companies in human development Sheikh Hamad Abdulla Jassim Al-Thani

Chief Executive Officer Vodafone Qatar

Aamal: Business strategy for environment, social and corporate governance Rashid Bin Ali Al Mansoori CEO Aamal Company



Dean Michael Trick

Community Partner Workshops

The Community Partner Workshop series expanded to include sessions by faculty members from both the Doha and Pittsburgh campuses. The world-class faculty of Carnegie Mellon delved into topics that are top-of-mind for people around the world, including Al, cybersecurity, supply chain, and digital accessibility. Nearly 1,500 people attended a total of 19 workshops during the academic year.

Carnegie Mellon Pittsburgh faculty

- Intersectional approaches to women's equality in the workplace, **Marian Aguiar**
- From zero to a billion: How we grew Net Health in three distinct phases, Patrick Colletti
- Group interactions and decision making, Chante Cox-Boyd
- The importance of the therapeutic relationship in helping professions, Crista Crittenden
- Driving innovation: Systems and frameworks for large-scale AI implementation in the industry, **Mohamed Farag**
- Leveraging generative AI to improve governmental activities and private sector performance high-level, Mohamed Farag

- Digital accessibility and equity: Where do we stand?, **Divakaran Liginlal**
 - Responsible governance of AI systems: Accountability and verification, Alex John London, Melissa McCradden
 - Changing your genes Genome, **Gordon Rule**
 - Design your life, Peter Scupelli
 - Social innovation: New ideas to change the world, Nico Slate Generative AI and systems thinking: A symbiotic synthesis,
 - Raja Sooriamurthi
 - Better together: Best practices in cocreation and community-generated art and design projects, **Dylan Vitone**

Memoranda of Understanding

CMU-Q signs memoranda of understanding with members of industry and government to promote learning and research and to provide opportunities for CMU-Q students and graduates. In 2023-24, four new agreements were signed.





"I strongly believe that as an institute of higher learning, we have a responsibility to share our expertise with the community. These workshops provide our community partners with insight and information so they can better understand the forces that are shaping the world."



 Addressing the gap in cybersecurity expertise, Hanan Hibshi

Carnegie Mellon Qatar faculty

- Qatar supply chain resilience: Navigating tomorrow, Iman Adeinat
- Unlocking leadership excellence: Strategy, vision, and resilience, **Hussein Fadlallah**
- Valuation for non-finance managers, **Fuad Faroogi**
- Improving product and package design using sensory marketing, Varun Sharma







Hamad Bin Jassim Center for K-12 Computer Science Education

For six years, the Hamad Bin Jassim Center for K-12 Computer Science Education has been inspiring curiosity in computing among middle and high school students in Qatar. A collaboration between CMU-Q and the Jassim and Hamad Bin Jassim Charitable Foundation, the center organizes a slate of programs and workshops for students. "Computer science has become an integral part of nearly every field, and I believe that every student should have a foundation in computing, regardless of what careers they ultimately pursue."

Khaled Harras Director, HBJ Center

Alice ME Programming Competition

The ninth annual Alice Middle East Programming Competition challenged students across Qatar to create games and animations using the Alice educational software. This year, 115 student teams from 50 schools submitted unique projects in the categories of cybersecurity, sustainability, crisis management, health and wellness, and entrepreneurship.

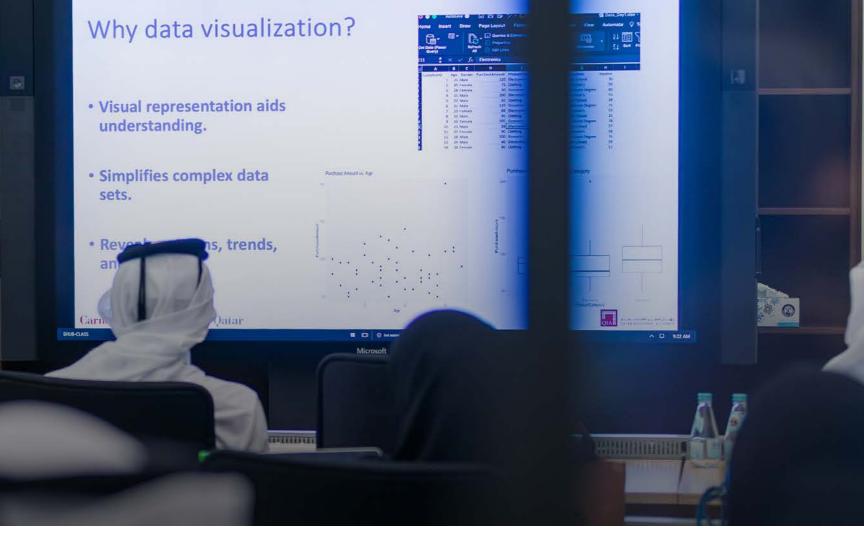
Alice was created at CMU and adapted for Qatar by CMU-Q. Programming using Alice is a curriculum component of the information and communication technology courses taught in Ministry of Education and Higher Education schools, as well as several private schools in Qatar.

MindCraft

MindCraft is a suite of workshops and camps designed to spark interest in computer science, and to explore the basics of coding. During the year, the HBJ Center held 13 one-day MindCraft Alpha workshops for 1,028 students, and nine bespoke MindCraft OnDemand workshops for 947 students.

MindCraft has also developed in-depth MindCraft Camps for students during their school breaks, covering topics like Python, Al and machine learning, and cybersecurity. There were 13 camps during the academic year, and more than 330 students attended.

<u> Qatar Investmen</u> Authority Center for Professional Education and Research



The Qatar Investment Authority and CMU-Q formed a new center dedicated to enriching business education in the Gulf region. The QIA Center for Professional Education and Research fosters an environment of learning and innovation in business administration. Iman Adeinat and Fuad Farooqi serve as co-directors.

As part of the agreement, CMU-Q will provide education and training for the QIA apprenticeship program, and the QIA Center will also support the development of Qatar-specific business cases that can be used for teaching business students in the Gulf.

Case Hub

Case Hub is a research initiative that works with local businesses to create educational case studies for the classroom. Using region-specific cases helps CMU-Q students learn business concepts that are relevant and contextual for business students and graduates.

"Cases put the students in the shoes of the decision makers, and through this experience the students learn how to weigh information and make decisions."

Iman Adeinat Co-director, OIA Center

"Case Hub is creating cases about businesses from this region that will provide a richer, context-specific understanding when students begin their careers in Qatar."

Fuad Faroogi

Co-director, QIA Center

QIA Apprenticeship Program

The QIA Center delivered a nine week professional education series to 20 new employees of Qatar Investment Authority, including lessons in finance, Microsoft Excel, project management, business communications, business presentations, leadership, negotiations, cybersecurity, and business analysis. This was the second cohort through the program.

Carnegie Mellon Connections

We are proud to be part of the Carnegie Mellon global community, connected to the scholarship, research, spirit and culture that defines Carnegie Mellon worldwide.

Rwanda professional development trip

CMU-Q faculty and staff members traveled to Rwanda for a high-impact professional development experience. The trip was an opportunity to forge connections among one another, as well as members of the CMU Africa community. Mohammed Khodary and Kranthi Sangishetty served as trip leaders.



ADDvocates

The fall ADDvocates course was taught online with students on the Qatar and Pittsburgh campuses. **Ezzohra Moufid** and Annette Vincent taught the 6-unit course from Qatar, and Ayana Ledford coordinated through Dietrich College. In the spring, CMU-Q successfully piloted the option of a 9-unit course.

CMU College Council presentation

Pía Gómez-Laich, Thomas Mitchell and Silvia Pessoa

presented their research on tools to support student writing across the disciplines to the Carnegie Mellon College Council in Pittsburgh.

CMU alumni gathering in Dubai

Carnegie Mellon graduates in the region reconnected and networked for an evening in Dubai. The event drew community members from both the Pittsburgh and Qatar campuses, including alumni, staff, and faculty.



Sound of the Baroque flute

Stephen Schultz, teaching professor of music history and director of the Carnegie Mellon Baroque Orchestra, delivered an interactive talk about the history of the Western concert flute for the CMU-Q library.



IMPAQT

The annual Initiating Meaningful Pittsburgh and Qatar Ties trip took place, with cohorts from each campus experiencing a week at the other location.



Micro courses

broad range of disciplines.



- Transnational feminisms, Marian Aguiar
- Innovation and the entrepreneurial mindset, Patrick Colletti
- Introduction to health psychology: SES and health inequalities, Chante Cox-Boyd

Taught by faculty members from the Pittsburgh campus,

micro courses offer CMU-Q students a sampling of CMU's

- Introduction to health psychology: Methods of inquiry, Crista Crittenden
- Innovation in building AI-products, Mohamed Farag
- Cybersecurity in our daily applications, Hanan Hibshi
- Digital accessibility fundamentals, **Divakaran Liginlal**
- Genome editing, past, present, and future, Gordon Rule
- Biopharma protein based pharmaceuticals, Gordon Rule
- Love, drugs, and war: The obsessions of history's great composers, Stephen Schultz
- Design your life, Peter Scupelli
- Puzzles, games, and problem solving, Raja Sooriamurthi
- Creating the future: The history of innovation, Nico Slate
- Introduction to health psychology: Stigma and its consequences, Michael Trujillo
- The portrait, Dylan Vitone

Campus exchange

Five students from Carnegie Mellon's campus in Pittsburgh spent a semester in Qatar during the academic year. A record number of 82 CMU-Q students spent the summer, fall or spring semester in Pittsburgh.



Diversity, Equity, Inclusion, Belonging

At Carnegie Mellon, the principles of diversity, equity, inclusion and belonging guide our values and serve as our foundation. The Qatar campus is committed to building a campus climate that embodies these principles.

Vice provost visit

Wanda Heading-Grant, CMU's vice provost for diversity, equity and inclusion and chief diversity officer, and Stephanie Shea, case manager of the Office for Institutional Equity and Title IX, visited the Qatar campus to share insights on DEIB initiatives. Heading-Grant and Shea also led a session for supervisors on best work climate practices.



Carangele Medicus L'activersity Chaith TARTANS

Karak Konnections Series

More than 200 community members participated in Karak Konnections, a venue for community members to meet and learn about others from different backgrounds. Nearly every student applicant for DEIB committees this year cited Karak Konnections as an event that drew them to volunteer.

Equity and inclusion in the Doha workplace

DEIB joined forces with Career Development at CMU-Q to host a panel with industry representatives on the roles of equity and inclusion in the Doha workplace. The panel included guests from SLB (Schlumberger), Clyde & Co., Great Place to Work and KPMG.

Club partnership

DEIB partnered with the Arts and Crafts Club to deliver a two-part Ramadan decoration event to build community and celebrate culture. The partnership will serve as a model moving forward to engage students in aspects of DEIB as they plan club activities and events.



Inclusive mentorship data

The Research and Data Group collected a second round of data for a research project that explores the current mentorship models and experiences of faculty and students who present projects at Meeting of the Minds.

Women Leaders in Higher Education

CMU-Q is a founding member of this multiversity collaboration supporting DEIB in Education City. For the 2023-24 year, Annette Vincent served as chair, and Iman Adeinat was a committee member.

Leading Together Conference

More than 90 registrants attended the one day event that was sponsored by CMU-Q and Texas A&M University at Qatar located in Multaga. Kira Dreher delivered opening remarks, and Hussein Fadlallah presented a workshop on inclusive leadership.



Student Experience

Throughout their undergraduate education, students are part of a supportive community that encourages them to grow and thrive, both in and out of the classroom. During this four-year journey, they celebrate together, explore their interests, learn to find balance, and prepare to embark on their careers.

A Strong, Connected Community

Our campus is a unique place to study: students of all majors and cohorts, along with their Education City peers, form a close-knit, diverse community that is enthusiastic, supportive and encouraging.

Tarnival

For the first time after the pandemic, students organized Tarnival. The Tartan carnival takes place on the Green Spine and brings together faculty, staff, students and alumni, as well as members of the Education City community.

Student-led community events

Students took the lead organizing events to celebrate the diversity of the Tartan community. Highlights included International Night and Tartans Got Talent, which showcased the rich tapestry of culture and talent within the student community.

Student Mailis

Student Majlis is CMU-Q's student government body, elected each year by the students. Student Majlis guides much of the life and activities on campus, and they are a critical liaison between the students and faculty and staff.

- President: Hala Al Darbasti
- Vice president: Noora Almannai
- Head of clubs: Maryam Al-Ghanim
- Head of sports and wellbeing: Fatima Al Jaidah
- Head of finance: Akniyet Serikbay
- Head of communications: Sara Al Mana
- Head of academics: Lulu Al-Majed

Multiversity Connections



Model United Nations

CMU-Q sent two delegations of 12 students to participate in Georgetown University in Qatar's fall 2023 Model UN competition. Model United Nations is a student-run simulation of the United Nations, where students assume the roles of foreign diplomats to learn about international politics and diplomacy.

Thursday Majlis

Each week, students from all cohorts and majors come together for Thursday Majlis. The executive team hosts community building activities such as quizzes, games, and musical performances.

Cohort-building experiences

Student class representatives organize weekend and breakweek experiences for the four classes. Highlights from last year include the senior kayaking trip, the senior dhow cruise, first-year movie night, and first-year ice skating.

Qatar Foundation Charity Week

CMU-Q students joined in QF Charity Week to raise money for international humanitarian projects, including orphan sponsorship, emergency relief, medical aid, and education. Charity Week is a volunteer-led non-profit organization that is active in Canada, Ireland, Germany, Malaysia, Qatar, South Africa, the United Kingdom and the United States.

Personal Growth and Development

CMU-Q sees each student holistically. During the undergraduate journey, we provide opportunities and support for students to grow in intellectual and artistic curiosity, personal well being, professional development, leadership, social responsibility, and intercultural learning.

Holistic wellbeing

Peer Health Advocates

There were seven student leaders who served as Peer Health Advocates during the academic year, working in partnership with Student Affairs to support wellness initiatives and promote health education.

World Mental Health Day

In collaboration with Student Majlis, the Peer Health Advocates hosted a special Thursday Majlis focused on mental wellbeing. CMU-Q's psychologist, **Atorina Benjamin**, answered questions about how students can support their own mental health, as well as those in their community.

Respond training

The Respond Mental Health Training Workshop helped 22 faculty and staff members build confidence in recognizing and correcting misconceptions about mental health problems and supporting community members who are in distress.

Bystander intervention training

Student Affairs hosted bystander intervention training to help students recognize potential harmful situations and choose a response method that can positively influence the outcome.

Health and wellness collaborations

- Education City Health Advisory Committee
- Flu and COVID vaccine campaigns, with QF Occupational Health
- Blood sugar screenings, with the Qatar Diabetic Association
- Body fat analysis and nutritional consultations with a QF nutritionist

Global Learning Trips

Global Learning Trips are faculty and staff-led programs for students to experience an interdisciplinary theme through cultural exploration. This year, we offered eight experiences with 101 students participating:

- Women's empowerment, Dublin, Ireland
- Food insecurity volunteer program, Ho Chi Minh, Vietnam
- Exploring the intersection between technology, business and culture, Seoul, South Korea





- Art meets technology in Emilia-Romagna, Modena and Bologna, Italy
- Unveiling Japan: Embracing tradition and innovation, Tokyo, Japan
- Initiating Meaningful Pittsburgh and Qatar Ties (IMPAQT), Pittsburgh, USA
- Healthy Tartans, Seoul, South Korea
- Achieving carbon neutrality, Kathmandu, Nepal and Thimphu, Bhutan

Leadership and Career Readiness

Leadership development

Student clubs

Organized and led by students, clubs bring together students and community members who share a variety of interests: academic enrichment, cultural identities, hobbies and recreation, and sports. Through organizing activities and events, students build the skills of time management, collaboration, and community stewardship.

Student Majlis club awards

Each year, Student Majlis recognizes exceptional club activities. The winners this year were selected from 42 clubs that were officially recognized during the academic year.

- Best community contribution: Muslim Student Association (MSA), Arts and Crafts Club
- Best community event: Palestinian Identity Club (PIC), Muslim Student Association (MSA), Qatari Student Association (QSA)
- Most creative marketing: Arts and Crafts Club
- Best new club: Padel Club
- Club of the year: Padel Club

Senior Leadership Awards

Senior Leadership Awards are presented each year to graduating seniors who demonstrated extraordinary leadership and made substantial contributions to the community during their time at CMU-Q.

- Ahmad Alhallaq (with distinction)
- Fadia Hussain (with distinction)
- Hana Abdelmajid
- Katrina Agcaoili
- Mary Effie Akinyi
- Muneera Al-Baker
- Marwa Darwish
- Yahya Elkhatib
- Mariam Elmeragawi
- Mariam Hamad
- Osman Mohamed

Career readiness

Career Cafe

In both fall and spring semesters, CMU-Q hosted Career Cafe Safa Salim (BS 2017), Yusuf Musleh (CS 2016), Nofe Alfor employers to share information about their organizations, Suwaidi (BA 2013) and Ghanim Al-Sulaiti (IS 2012) shared advice and work experiences with CMU-Q students at the network with students, and share internship or job possibilities. Tartan Talks panel discussion.

Future's Fair

In fall 2023, CMU-O held the first Future's Fair to showcase options for career paths and graduate school. More than 50 employers attended, as well as eight graduate schools.

Internship Showcase

Students presented their summer internship experiences to an audience of peers, faculty, staff and employers. A networking reception followed the presentations.

Careers in Consulting

This Education City-wide event connects students to the top consulting firms in Qatar to learn about the industry and application process.

Career Readiness Week

The Education City Careers Services Advisory Committee organized a week of career and professional development preparation before the Education City Career Fair. Mock interviews were offered by Deloitte, Excelledia Quality Consulting, Ministry of Communication and Information Technology, QatarEnergy LNG, and UBS.

Education City Career Fair

CMU-Q and Texas A&M at Qatar hosted the Education City Career Fair. More than 100 prominent companies from various industries and sectors in Qatar came to the fair to meet students and alumni from the partner universities.





Tartan Talks

Career development mini-course

CMU-Q launched a mini-course titled, "Get career ready." The course was also available to students asynchronously so they could engage in career exploration and readiness skills.

Industry collaborations

- Mentoring programs with Deloitte and PwC
- Office visits for students to visit Microsoft, Bain & Co and PwC
- Case prep consultations with Bain & Co, BCG, and Oliver Wyman, in collaboration with the Consulting Club
- A session with Qatar State Audit Bureau to discuss safeguarding public finances, in collaboration with Carnegie Mellon Finance Association
- A session by UBS sharing insights about career paths, talents programs and application processes, in collaboration with the Computing Club



Research and Innovation

Research and innovation are an integral part of Carnegie Mellon, and the Qatar campus is no exception. Faculty and students engage in projects that address local and regional challenges, and we seek out areas of inquiry that are aligned with Qatar's national priorities, including artificial intelligence and sustainability.

The Year in Faculty Research

CMU-Q faculty members research questions across a broad spectrum of disciplines. They are active within Qatar's research community, and they contribute to the engines that drive international research, including scholarly publications, professional organizations and academic conferences.



New seed grants

Seed research funding from Qatar Foundation supports long-term faculty as they build impactful projects for Qatar and the world.

- Iman Adeinat, Enhancing retail supply chain resilience: Supplier diversification strategies amidst supply chain disruptions
- Jocelyn Bélanger, Countering extremist ideologies through cognitive-behavioral therapy interventions: A novel approach
- Andrés Castaño Zuluaga, Spreading the good fortune: An analysis of diversification and complexity across economic sectors in Gulf countries over 2000-2020
- **Layan El Hajj**, Geometric and gualitative analysis in free boundary problems
- Hussein Fadlallah, Semi-decentralized platform governance: A qualitative study

- Eduardo Feo Flushing, e-Rshad: Enabling inclusive indoor navigation for individuals with visual impairments
- Ki-Won Haan, Investigating the role of team design in enhancing collaboration
- Nimer Murshid, Innovative hybrid plasmonic metal nanoparticles: Synthesis, characterization, and exploration of their stability and cytotoxicity for advanced biosensors
- Adviti Naik, Investigating PARP inhibition in colorectal cancer cell lines and combinatorial approaches to improve sensitivity
- Lama Nassif, Teaching grammar in the L2 Arabic classroom: A focus on form practice
- Silvia Pessoa, Refining and developing tools to support academic, disciplinary, and professional communication



New international research community contributions

Nesrine Affara and Jeffrey Squires served as co-chairs for the permanent panel, "Science and Fiction," for the Midwest Modern Language Association (MMLA).

Chadi Aoun served as track co-chair, Green IS and Sustainability (SIGGreen), Americas Conference on Information Systems in Panama

Kira Dreher served as program co-chair of IEEE's International Professional Communication Conference at Cornell University in New York, USA.

Nui Vatanasakdakul served as research track chair, Green IS and Sustainability (SIGGreen), Americas Conference on Information Systems in Panama.

Top paper finalist, ACM SIGSPATIAL

A research paper co-authored by Khaled Harras was recognized as one of four top papers at the 31st ACM SIGSPATIAL, the premier conference for research covering conceptual, design, and implementation aspects of geospatial data.

Revolutionizing vertical greenwalls

Oatar National Research Fund awarded a new grant to develop more efficient and sustainable vertical greenwalls. Led by Jayaprakash Saththasivam, a scientist at QEERI, the team's approach involves repurposing agricultural waste and greywater. CMU-Q's Deepa Nair will contribute her expertise in the social and cultural implications of sustainable agriculture.

Sui Academic Research Award

Giselle Reis received a Sui Academic Research Award for her project, "A framework for high-assurance verification of decentralized Oracle protocols." The Sui Foundation promotes research and innovation using the Sui blockchain technology.

CMU-Q hosted the first Qatar Business and Economics Symposium to bring together researchers to share their projects, receive feedback, and network with potential collaborators. Veli Safak was the chief organizer of the event.

CMU-O Statistical **Consulting Center** workshops

The CMU-Q Statistical Consulting Center continued its workshop series with three sessions:

- What statistical analysis should I use? Taeyong Park
- Data visualization with Tableau. Sameer Mathur
- Data visualization and statistical analysis with SPSS, Sameer Mathur

Participants included CMU-Q community members, as well as researchers from Georgetown University in Qatar, Northwestern University in Qatar, Qatar Academy, Qatar Foundation, Sidra Medicine, and Texas A&M University at Qatar.

Focus on AI

At Carnegie Mellon, the place where artificial intelligence was invented more than half a century ago, we understand that we have an obligation to study and create new frontiers in AI. CMU-Q's faculty members are experts in a myriad of disciplines that define AI today, and how it will be used in the future.

Active QNRF-funded projects in AI

- Dimension-specific automated scoring of Arabic language writing proficiency, Submitting Institution: Qatar University; CMU-Q PI: Houda Bouamor
- Resources and applications for detecting and classifying polarized and hate speech in Arabic social media, Awarded to HBKU; CMU-Q PI: Anis Charfi
- Greenhouse-5.0: AI robotics for automated data collection, analytics, and decision support in greenhouse farming, LPI: Gianni Di Caro
- Autonomous PV cleaning and inspection system for hot desert weather conditions, Awarded to HBKU; CMU-Q PIs: Eduardo Feo Flushing and Gianni Di Caro
- HyBrush: A hybrid UAV brushing system for PV monitoring and cleaning, Primary research mentor: Eduardo Feo Flushing

Generative AI Teaching as Research Initiative

Carnegie Mellon's Eberly Center launched the GAITAR Initiative to measure the impacts of the generative artificial intelligence tools on students' learning and educational experiences. In the initiative's first year, Houda Bouamor and Nimer Murshid each were granted fellowships to investigate the impact of generative AI tools in their courses.

Media and AI curriculum

CMU-Q and Northwestern University in Qatar are exploring a new joint curricular collaboration in media and Al that includes coursework in coding, computer science, ethics, and social impact

Thought leadership

- Nasser Alaeddine, executive panelist, "Role of technology in improving learning and delivery of education,"
- Future of Education Summit 2023 Chadi Aoun, chair for spotlight
- session on "Green IS for a sustainable world: AI, IoT, and decarbonization." Americas Conference on Information Systems (AMCIS 2023)
- Maher Hakim, speaker, "Will the latest AI breakthroughs widen the inequity gap? Or can they be harnessed to bridge it?" Doha Tech Angels LLC Panel Series, Web Summit Qatar 2024
- Web Summit Qatar 2024 Mohammad Hammoud, panelist, "Digital marketing: Horizons in the Al era," ROWAD 2023
- **Khaled Harras**, panelist for "Al and education: Ensuring a seat for every learner in an Al era," Global Education Forum 2024
- opportunities," 2023



 Mohammad Hammoud, speaker, "AI and medicine: Will the whole finally exceed the sum?"

- Khaled Harras, speaker, "Education in the age of AI: Challenges and
- Qatar Foundation Multiversity Talks

- Khaled Harras, panelist for "Bridging the Gap: Higher education and industry in the age of Al," WISE 2023
- **Khaled Harras**, television feature interview, "AI and education," Euronews
- Lama Nassif, panelist at "Charting" the future of education: Roadmap for AI integration in the classroom," WISE 2023
- Kemal Oflazer, chief specialty editor, Frontiers in Al — Language and Computation
- Jeffrey Squires, Dudley Reynolds and Hope Rodefer, presenters, AI+X session, Second Multiversity Symposium, Education City

Focus on Sustainability

Carnegie Mellon University is committed to fostering a sustainable future for all by integrating the Sustainable Development Goals (SDGs) into education, research, and practices. At the Qatar campus, we share this collective vision for a healthy planet, as well as equity that supports social, economic and environmental justice.

LifeLines: Software that Saves Lives

A student-led team created a platform called LifeLines: Software that Saves Lives that encourages collective responsibility and harnesses technology to tackle the challenges of humanitarian crises. To introduce the platform to the community, LifeLines held a hackathon that brought together 115 students from eight universities and 12 high schools in Qatar.







Top ideas at LifeLines

- An app that uses mobile phone technology to assist visually impaired people in crisis situations, CMU-Q's Mariam Elmeragawi, Hao Mei, Eaint Thet Su, and Zhijie Xu
- A tool for checking news items for truth and bias, CMU-Q's Thang Bui-Nguyen, Demetre Devidze, Andrey Genze, and Thuc Ngo
- A tool that creates a heat map of people in need in crisis zones, Qatar University's Mohamed Majd Aleslam, Ahmed Ashraf, Omar Elshenhabi, Aly Soliman

Education for sustainable development

Jennifer Bruder authored a module for the MOOC Education for Sustainable Development by HBKUx. Bruder's contribution, "The head, heart, and hands of ESD: An in-depth analysis using Sustainable Development Goal 12," is part of a QNRF-funded project that she shares with researchers at Hamad Bin Khalifa University.

Active, QNRF-funded projects in sustainability

- CMU-Q Sub-project 6: Assessing baseline sustainability literacy and awareness of SDGs and develop and test interventions, Prime project: SDG education and global citizenship in Qatar: Enhancing Qatar's nested power in the global arena, Awarded to HBKU; CMU-Q LPI: Jennifer Bruder
- Greenhouse-5.0: Al robotics for automated data collection, analytics, and decision support in greenhouse farming,
- LPI: Gianni Di Caro
- Autonomous PV cleaning and inspection system for hot desert weather conditions, Awarded to HBKU; CMU-Q PIs: Eduardo Feo Flushing and Gianni Di Caro
- HyBrush: A hybrid UAV brushing system for PV monitoring and cleaning, Primary research mentor: Eduardo **Feo Flushing**



volunteers serving as instructors for basic, false beginner, intermediate, and advanced levels. Erik Helin led the initiative and mentored the instructors throughout the year.

3D printing for food security

Students Lujain Al Mansoori and Mohammad Annan held a workshop to share with the community their idea to use 3D printing technology to strengthen food security. The team is devising a novel way to print fruits and vegetables as a food source option in places like Qatar where arable land is limited.



EcoCampus

CMU-Q's EcoCampus team, comprising faculty, staff and students, followed a structured plan to improve sustainability and equity at the campus. The team has applied for the green flag designation from Foundation for Environmental Education (FEE), in collaboration with the EcoCampus national operator in Qatar, Earthna.

EcoCampus conference

A CMU-Q research team participated in the first international conference of FEE EcoCampus with two presentations.

- Daoud, Malika Dixit, MD Irfan Sadique, Sara Al-Saloos, and Jennifer Bruder
- Experiential learning and wellness in sustainability education: Bridging DEIB and environmental stewardship in ecoexpeditions on a global scale, Angela Ng, Rosemarie Florida, Jennifer Bruder

Sustainability Charter Michael Trick signed a Sustainability Charter on Earth Day to

formalize CMU-Q's commitment to embrace environmental and social responsibility and inspire positive change. "We have made tremendous strides in

building sustainability into everything we do. It is important for Qatar. It is important for Carnegie Mellon University in Qatar."

Dean Michael Trick



Mapping faculty research to SDGs: Experiences, challenges and recommendations, Reya Saliba, Anurag Aryal, Jamil

Student Research

A unique aspect of CMU-Q is the emphasis we place on undergraduate research. Students are encouraged to find research questions that will have an impact, especially in a local or regional context. They learn how to investigate these questions through opportunities in class, summer internships and programs, and independent study under the guidance of a faculty member.

Summer Undergraduate Research Apprenticeship

The SURA program offers undergraduates with little or no experience to learn research techniques over the summer under faculty guidance. Students who participate in SURA often go on to pursue independent research projects. There were 17 students in SURA during the summer of 2023.



Maiāl

CMU-Q's peer-reviewed undergraduate journal published five articles authored by students in the areas of biology, environmental psychology, corpus linguistics, and information systems. Two of these articles included faculty coauthorships, a first for the journal.

Qatar Student-Initiated Undergraduate **Research Program**

QSIURP is an opportunity for more experienced student researchers to investigate a project over the summer that is driven by their interests.

AlDana Aldisi

Jeff Squires

QSIURP projects, summer 2023

Abdelrahman Abdelnaby Learning rules of self organization for local independent agents in collective systems Faculty advisor: Gianni Di Caro

Abrar Tasneem Abir Deep-reinforcement-learning-based decentralized multi-robot task allocation in connectivity-constrained environments Faculty advisor: Eduardo Feo Flushing

Mariam Afifi Functional analysis of ncRNAs in breast cancer cells Faculty advisor: Ihab Younis

Mary Effie Akinyi Oluoch Is fiscal policy implementation enough to address the looming debt crisis in Kenya? Faculty advisor: Agustín Indaco

College Honors

In each academic program, students may pursue College Honors, which includes a year-long thesis project, capped off with a presentation to faculty, students, staff and families.

Class of 2024 thesis presentations

Shaikha Al-Sulaiti Investigating the functional significance of the novel IncRNA RNA I in breast cancer Faculty advisors: Ihab Younis and Adviti Naik

The gamification and adoption of

Faculty advisors: Chadi Aoun

Indoor mapmaking: From map

drawing to navigable representations

Faculty advisors: Khaled Harras and

and Nui Vatanasakdakul

Eduardo Feo Flushing

location-based applications in building

Faisal Al-Thani

local communities

Huda Baig

Malika Dixit Exploring gender bias in STEM fields -Implications for female representation in academia Faculty advisor: Houda Bouamor

Adel Fergatova The potential role of miRNAs in fibroblast activation Faculty advisor: Nesrine Affara

Hana Hasna Investigating the functional role of a PTEN-derived noncoding RNA via micro-RNA sequestering in breast cancer Faculty advisors: Ihab Younis and Adviti Naik

Kainaat Nadeem Khan Evaluating the effect of ECM proteins on breast cancer cells Faculty advisor: Mohamed Bouaouina

76 Research and Innovation

An interdisciplinary approach to understanding the correlation between cancer representations and research funding Faculty advisors: Nesrine Affara and

Mohammad Annan Computational simulation of carbon nano-material for automotive applications Faculty advisor: Mohamed Zayed

Ahmed Issaoui Automated hairstyle recommendation and synthesis using generative models and reinforcement learning Faculty advisor: Houda Bouamor

Kainaat Khan Evaluating the effect of various ECM

proteins on the cellular growth and cell shape of MDAMB231 breast cancer cells Faculty advisor: Mohamed Bouaouina

Abeeha Shoaib and Aaliya Savira How did COVID-19 affect Shariah compliant versus conventional firms' operating performance? Faculty advisor: Serkan Akgüç

Eaint Thet Su Deciphering the reciprocal communication between breast cancer tumors and naive fibroblast cells Faculty advisors: Nesrine Affara and Mohamed Bouaouina

Maya Salameh Investigating sage's anti-cancer properties Faculty advisor: Nesrine Affara

Eaint Thet Su Migration and chemoresistance in breast cancer-fibroblast interaction Faculty advisors: Nesrine Affara and Mohamed Bouaouina

Diram Tabaa Deep learning in 3D: Enhancing point cloud data for real-world Faculty advisor: Gianni Di Caro

Fiza Tarlochan Investigating minor intron splicing in breast cancer cells Faculty advisor: Ihab Younis

Meeting of the Minds

The Meeting of the Minds symposium showcased 51 posters that touched on many of the key challenges facing Qatar, including precision medicine, sustainability, gender equity and artificial intelligence. The event was supported by the Planning and Statistics Authority, who provided special awards to the posters best representing Qatar Vision 2030. The event prizes were sponsored by Masraf Al Rayan bank, including cash prizes for all six of the winners. Award winners were selected by experts from 10 organizations in Qatar, as well as judges from CMU-Q.



Best undergraduate research project

First

Adel Fergatova Evaluating miRNA expression during fibroblast activation Faculty advisor: Nesrine Affara

Second

Second

Fiza Tarlochan

in breast cancer

Faculty advisor: Ihab Younis

Aiman Fatima and Fadia Hussain ReviveWear: Revolutionizing fashion sustainability through an integrated IS Solution Faculty advisor: Chadi Aoun

Third Hana Hasna Characterizing the functional mechanisms of a novel PTEN long non-coding RNA in breast cancer Faculty advisors: Ihab Younis and Adviti Naik



Most promising research

First Mariam Afifi Functional analysis of a novel IncRNA in breast cancer Faculty advisor: Ihab Younis

78 Research and Innovation



Deregulation of minor intron splicing



Third Abeeha Shoaib

and **Diaz Aaliya Savira** From crisis to recovery: A comparative study of COVID-19's impact on Shariah-compliant vs. conventional firm profitability Faculty advisor: **Serkan Akgüç**

Best poster

First

Malika Dixit and Noora Al-Saadi Exploring gender bias in academic job descriptions – What influences masculine gender bias in job ads? Faculty advisor: Taeyong Park

Planning and Statistics Authority (PSA) awards

The Planning and Statistics Authority awards are given to the best posters representing the Qatar Vision 2030, covering the four pillars of human, social, economic, and environmental development. PSA awards were presented by **Dr. Yousuf A. Rahman Almulla**, Director of Strategy Implementation Follow-up Department.

Mohammad Annan

FEA car crash test analysis software Faculty advisor: Mohammad Zayed

Dana Al Disi

Weaving with a pink ribbon an interdisciplinary analysis of cancer representation and research funding in Qatar

Faculty advisors: Jeffrey Squires and Nesrine Affara

Alyssa Bianca Magpantay, Abdulrahman Al Mana, Tameem Mahmoud, Khalid Al Thani and Nayef Al Kaabi Enhancing efficiency: Optimizing the supply chain processes of Gulf International Services Faculty advisor: Iman Adeinat

Second Ahmad Alhallaq and Ahmed Issaoui Deep learning for automated video assistant referee system (VARS) in football Faculty advisor: Gianni Di Caro

> Haya Al Khalifa, Alanoud Al Thani and Aisha Al Subaie Transthoracic echocardiography and mortality in sepsis: Analysis of the MIMIC-IV database Faculty advisor: Daniel Phelps

Malika Dixit Exploring gender bias in job descriptions in STEM fields: Implications for female representation in science, technology, engineering and mathematics Faculty advisor: Houda Bouamour



Our Stories

Through a variety of media channels, we share the milestones and achievements of the CMU-Q community. The success stories of our students, alumni and faculty are part of the larger story of Qatar's transformation into a knowledge-based economy. By sharing our community's achievements, we hope to inspire a new generation of students to imagine and deliver work that matters, both to Qatar and the world.

Marketing and Public Relations

Through carefully crafted campaigns, we reach out to the Qatar community, share our expertise, connect with prospective students, and raise awareness of our talented graduates with potential employers.



Experts contribute to the public discourse

As public awareness increases and questions arise about the role of AI, sustainability and education in our future, CMU-Q experts have been sharing their perspectives in a variety of forums. Faculty members have joined panel discussions, given media interviews, and spoken to general audiences about their thoughts and research on these vital topics. Marketing and public relations efforts during the year helped to share the depth and breadth of knowledge at CMU-Q with people in Qatar and around the world.

76 372 NEWS STORIES SUPPORTED EVENTS



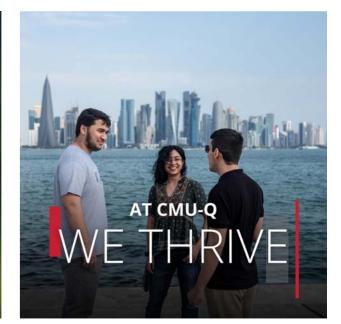
Social media

CMU-Q reaches prospective students, their parents, potential employers, and alumni through targeted social media posts. Overall, we published 662 posts across all platforms last year, with a total engagement of 120,195. LinkedIn had the highest engagement rate and audience growth of all the platforms. We also reached the milestone of 10,000 followers on Instagram.









Multimedia campaigns

CMU-Q ran multimedia campaigns to boost applications in select markets, encourage admitted students to enroll, and celebrate the achievements of the Class of 2024. Each campaign included video, image carousels, and web content to make an impression on our audiences.

The Year in the News



July 2023

- CMU-Q's Dudley Reynolds co-edits handbook on the multilingual classroom
- Carnegie Mellon Qatar launches computer science summer camps
- Language Bridges returns to CMU-Q

August 2023

- CMU-Q officially welcomes Class of 2027
- QF's Marhaba introduces newest students to Education City's world of opportunities
- Carnegie Mellon Qatar students win top foodtech idea for printing vegetables
- HBKU's QBRI cultivates future scientific leaders at 2023 Summer Research Program

September 2023

- Carnegie Mellon Qatar welcomes seven new faculty members
- Students hone biological science skills at CMU Pittsburgh
- Qatar Red Crescent signs co-operation agreement with CMU-Q
- Student Mohammed Annan QTV interview on 3D food printing innovation
- CMU-Q announces Qatar Campus Scholars for Class of 2024
- Carnegie Mellon Qatar announces highest enrollment in campus history

October 2023

- Carnegie Mellon, Doha College teams win Qatar Collegiate Programming Competition
- CMU inclusive teaching fellowship explores women and digital entrepreneurship
- Mohammed Annan and Lujain Al-Mansoori interview on 3D food printing innovation











IN THE NEWS







PRESS RELEASE

WEBSITE STORY

BROADCAST

November 2023

- A new kind of 3D-printed carrot, in the words of its Qatarbased inventors
- QTV interview with students Muneera Al- Baker, Noora
 Al-Saadi and Sharoq Darwish and Nui Vatanasakdakul on women's entrepreneurship in Qatar
 - Aamal CEO speaks at CMU-Q Dean's Lecture Series
 - Carnegie Mellon Qatar honors 175 students for academic excellence
 - Dean of CMU-Q teaches high school students at QF Math Circle

December 2023

- Computer science student speaks at Amazon OpenSearch conference
- CMU-Q students present research at Sidra precision medicine symposium
- CMU's Mona Diab: The next generation will serve Arabic using artificial intelligence
- Carnegie Mellon Qatar and MEEZA sign memorandum of understanding
- CMU-Q reaches out to students from Kuwait
- Qatar takes lead in combating desertification, says expert
 - Carnegie Mellon math professor retires after 20 years at Qatar campus

January 2024

- Director of CMU Language Technologies Institute shares
 insights into challenges and opportunities of Arabic Natural Language Processing
 - CMU-Q graduate wins four awards at Seoul invention fair
 - Carnegie Mellon Qatar research among top papers at international computing conference
 - CMU-Q professor is key organiser for global NLP and Generative AI conference
 - Carnegie Mellon Qatar Arabic debating team reaches USADC finals
 - QBWA official highlights women's pivotal role in Qatar's progress
 - First students of the Class of 2028 celebrate at CMU-Q campus



CMU-Q tailors business courses for Gulf region





86 Our Stories

- QNB CEO shares insights at CMU-Q Dean's lecture series
- Dania Makki QTV interview on career readiness
- Dudley Reynolds regional interview on knowledge cities
- Art and academics merge at Education City

February 2024

- CMU-Q students publish federated learning research in IEEE Internet of Things Journal
- Urmila Rosario: The CMU-Q alumna behind Australia's World Cup success
- Class of 2008 grad appointed Chief of Museum and Heritage Development, Qatar Museums
- Carnegie Mellon Qatar LifeLines Hackathon fosters ethical innovation

March 2024

- CEO of Vodafone Qatar addresses CMU-Q on telecommunications and digital development
- Rukhsar Neyaz is a "Tartan on the Rise"
- Musab Popatia is a "Tartan on the Rise"
- Sabih Bin Wasi is a "Tartan on the Rise"
- CMU-Q develops region-specific business courses
- Carnegie Mellon Qatar honors 172 students for academic excellence
- Carnegie Mellon Qatar graduating seniors join the alumni network
- DPS Modern Indian School wins Carnegie Mellon Qatar Pi Day competition

April 2024

- Washington Semester Program sparks CMU-Q student's passion for international development
- Carnegie Mellon team is first to represent Qatar at programming world championship
- Bio sci students present research at international breast cancer conference



CMU-Q symposium showcases research projects in key areas



PRESS RELEASE

WEBSITE STORY

BROADCAST

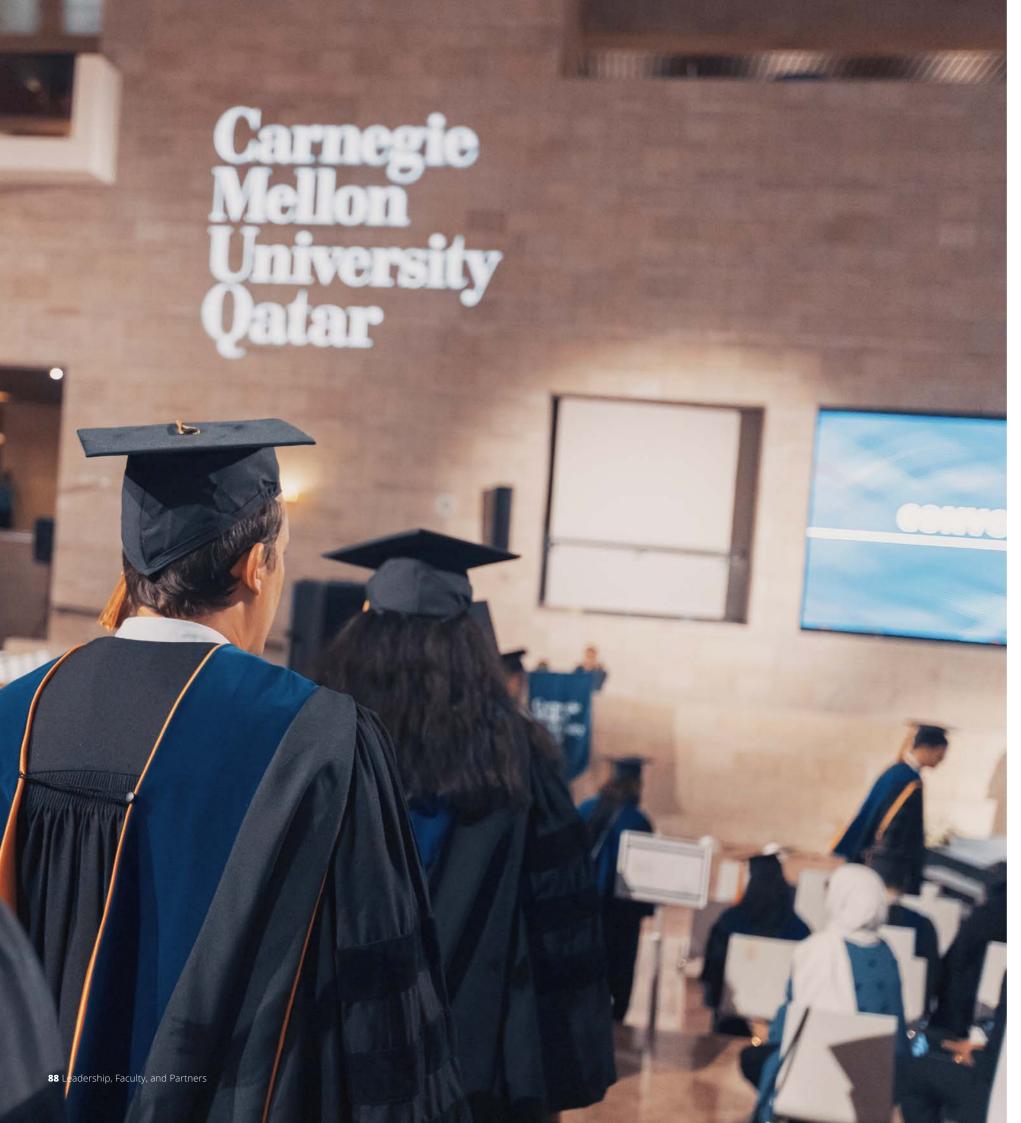
- Entrepreneurship course sparks idea for global health solution
- CMU-Q grad places first in Pitt Three Minute Thesis competition
- Students turn to 3D printing solutions to improve sustainability
- Largest CMU-Q graduating class has thrived with experiential learning
- Carnegie Mellon Qatar signs Sustainability Charter
- Carnegie Mellon Qatar celebrates newly admitted students
- Abdulrahman Darwish Fakhroo: Discovering a passion for understanding
- Diram Tabaa: Exploring opportunities to grow and learn

May 2024

- Muneera Al-Baker: Making a global impact
 - Nada Al-Najar: Exploring the root causes of disease
 - Gulnaz Serikbay: Thinking about the world in a different way
 - Osman Mamoon Osman Mohamed: Embracing the Education City experience
 - Carnegie Mellon Qatar celebrates largest graduating class in campus history
- Two CMU-Q graduates receive QF Excellence Awards
 - Carnegie Mellon Qatar and Iberdrola Sign Memorandum of Understanding
 - Christos Kapoutsis receives 2024 Meritorious Teaching Award
 - First Carnegie Mellon Qatar leadership program makes big impact across continents
- Education Above All Foundation CEO Fahad Al-Sulaiti
 highlights education and innovation in developing countries at Carnegie Mellon lecture

June 2024

- CMU-Q's Adviti Naik develops new course in precision medicine
- Hamad Bin Jassim Center for Computer Science Education organises 9th annual Alice Programming Competition
- CMU-Q symposium showcases research projects in key areas



Leadership, Faculty, and Partners

Advisory and Leadership

Joint Advisory Board

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H.E. Mrs. Reem Al Mansoori

Assistant Undersecretary, Digital Society Development Sector, Ministry of Communications and Information Technology

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Secretary

Qaisar Choudhary Chief Operations Officer, Carnegie Mellon University in Qatar

Dean's Office

Michael Trick

Dean Harry B. and James H. Higgins Professor of Operations Research

Khaled Harras

Senior Associate Dean, Faculty Teaching Professor, Computer Science

Dudley Reynolds Senior Associate Dean, Education Teaching Professor, English

Jennifer Bruder Associate Dean, Research Associate Teaching Professor, Psychology

Faculty Leadership

Arts and Sciences

Hasan Demirkoparan Area Co-Head, Arts and Sciences Teaching Professor, Mathematics

Silvia Pessoa Area Co-Head, Arts and Sciences Teaching Professor, English

Biological Sciences

Ihab Younis Area Head Associate Teaching Professor, Biological Sciences

Mohamed Bouaouina Associate Area Head Associate Teaching Professor, Biological Sciences

Business Administration

Fuad Farooqi Area Head Teaching Professor, Finance

Serkan Akgüç

Associate Area Head Associate Teaching Professor, Finance

Kira Dreher Associate Dean, Diversity, Equity, Inclusion and Belonging Assistant Teaching Professor, English

Fadhel Annan Associate Dean, Government and Corporate Affairs

Dalia Atef Rehal Associate Dean, Student Affairs

Qaisar Choudhary Chief Operations Officer

Kara Nesimiuk Chief Marketing and Communications Officer

Khalid Sarwar Warraich Chief Information Officer

Computer Science

Giselle Reis Area Head Associate Teaching Professor, Computer Science

Ryan Riley Associate Area Head Associate Teaching Professor, Computer Science

Information Systems

Daniel Phelps Area Head Associate Teaching Professor, Information Systems

Houda Bouamor Associate Area Head Associate Teaching Professor, Information Systems

Faculty Members 2023-2024

Mohammad Aazam Assistant Teaching Professor Information Systems

Iman Adeinat Associate Teaching Professor **Operations Management**

Nesrine Affara Assistant Teaching Professor **Biological Sciences**

Serkan Akgüç Associate Area Head, **Business Administration** Associate Teaching Professor, Finance

Chadi Aoun **Teaching Professor** Information Systems

Jocelyn Bélanger Associate Teaching Professor Psychology

Houda Bouamor Associate Area Head, Information Systems Associate Teaching Professor, Information Systems

Mohamed Bouaouina Associate Area Head, Biological Sciences Associate Teaching Professor, Biological Sciences

Jennifer Bruder Associate Dean, Research Associate Teaching Professor, Psychology

Andrés Castaño Zuluaga Assistant Teaching Professor Economics and Analytics

Anis Charfi Associate Teaching Professor Information Systems

Crista Crittenden Instructor Psychology

Hasan Demirkoparan Area Co-Head, Arts and Sciences Teaching Professor, Mathematics

Gianni Di Caro Associate Teaching Professor Computer Science

Cristian Dimitriu Visiting Associate Professor Philosophy

Kira Dreher Associate Dean, Diversity, Equity, Inclusion, and Belonging Assistant Teaching Professor, English

Layan El Hajj Associate Teaching Professor Mathematics

Hussein Fadlallah Assistant Teaching Professor Management

Fuad Faroogi Area Head, Business Administration Teaching Professor, Finance

Simon Faulkner Assistant Teaching Professor Chemistry

Eduardo Feo Flushing Assistant Teaching Professor Computer Science

Madhavi K. Ganapathiraju Visiting Associate Teaching Professor Computational Biology, **Computer Science**

María Pía Gómez-Laich Assistant Teaching Professor English

Ki-won Haan Assistant Teaching Professor Organizational Behavior

Susan Hagan Associate Teaching Professor Information Systems

Maher Hakim Distinguished Career Professor **Business Administration**

Mohammad Hammoud Associate Teaching Professor **Computer Science**

Khaled Harras Senior Associate Dean, Faculty Teaching Professor, Computer Science

Erik Helin Special Lecturer Spanish

Agustín Indaco Assistant Teaching Professor Economics

Christos Kapoutsis Associate Teaching Professor Computer Science

Niraj Khare Associate Teaching Professor Mathematics

Selma Limam Mansar Teaching Professor of Information Systems Emeritus

Sameer Mathur Associate Teaching Professor Marketing and Business Technologies **Patrick McGinnis** Distinguished Career Professor **Business Communication**

Thomas Mitchell Associate Teaching Professor English

Ezzohra Moufid Lecturer French

Nimer Murshid Assistant Teaching Professor Chemistry

Adviti Naik Assistant Teaching Professor **Biological Sciences**

Deepa Nair Assistant Teaching Professor History

Lama Nassif Associate Teaching Professor Arabic Studies

Kemal Oflazer **Teaching Professor Computer Science**

Marion Oliver **Teaching Professor** Mathematics

Taeyong Park Assistant Teaching Professor Statistics

Silvia Pessoa Area Co-Head, Arts and Sciences Teaching Professor, English

Daniel Phelps Area Head, Information Systems Associate Teaching Professor, Information Systems

Benjamin Reilly Teaching Professor History

Giselle Reis Area Head, Computer Science Associate Teaching Professor, Computer Science

Dudley Reynolds Senior Associate Dean, Education Teaching Professor, English

Ryan Riley Associate Area Head, Computer Science Associate Teaching Professor, **Computer Science**

Veli Safak Assistant Teaching Professor Economics

Reya Saliba Library

Varun Sharma Assistant Teaching Professor Marketing

Jeffrey Squires Assistant Teaching Professor English

Michael Trick Dean Harry B. and James H. Higgins Professor of Operations Research

Tatiana Usova Director Library

Nui Vatanasakdakul Associate Teaching Professor Information Systems



Instruction and Outreach Librarian

Annette Vincent Teaching Professor Biological Sciences

Anthony Weston Associate Teaching Professor Mathematics

Zelealem Yilma Associate Teaching Professor Mathematics

Ihab Younis Area Head, Biological Sciences Associate Teaching Professor, **Biological Sciences**

Mohamed Zayed Associate Teaching Professor Physics

Community Partners

Carnegie Mellon has built relationships with companies and organizations across various sectors. Our partners work closely with us by speaking through our career development team, providing internships and jobs, participating in Community Partner Workshops, sponsoring students, sponsoring events and strengthening ties through Memoranda of Understanding.

- Aamal Company
- Abulssa Holding
- Accenture
- Ahli Bank QPSC Qatar
- Al Faisal Holding
- Al Jazeera Media Network
- AlFaisal Without Borders Foundation
- Alfardan Group
- Ali Bin Ali Group
- AMLAK Holding
- Amiri Diwan
- Apparel Group Qatar
- Aspire Zone Foundation
- Avey
- Azadea Group
- Bain & Company
- Baker Tilly
- Baladna Food Industries
- Barker Langham (BLR Doha)
- Barzan Holdings
- Baseel/MBK Holding
- belN Media Group
- BLJ Worldwide
- BLR World
- Boeing
- Boston Consulting Group Canon Office Imaging Solutions
- Cerebrum
- Chiyoda Almana Engineering
- Cisco Qatar
- Citi Bank
- Civil Service and Government
- Development Bureau Clyde & Co
- Coca-Cola
- Commercial Bank of Qatar
- Communications Regulatory
- Authority

94 Leadership, Faculty, and Partners

Council of Ministers

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- Doha Bank
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- Earthna
- EButler
- Education Above All
- Education USA
- Elegancia Healthcare
- Embassy of the State of Kuwait
- Enable.tech
- Equine Veterinary Medical Center
- Estithmar Holding QPSC
- Excelledia Quality Consulting
- ExxonMobil Qatar
- EY
- Facilities Management and Maintenance
- Forvis Mazars Qatar
- Fragomen
- GE
- Georgetown University in Qatar
- German Embassy in Doha
- Great Place to Work
- Gulf Bridge International
- Gulf Business Machines
- Gulf Drilling International Ltd
- Gulf Organization for Industrial Consulting
- Hamad Bin Khalifa University
- Hamad International Airport
- Hamad Medical Corporation
- Hapondo
- Henkel

- Hewlett Packard Enterprise
- Hilti
- Hilton Doha
- HyperThink Systems
- HSBC Bank Middle East Limited
- iHorizons
- Iberdrola Innovation Middle East
- Ibtikar Technology Solutions
- IN-Q Enterprises by Qatar Museums
- Information and Communication Technology W.L.L.
- INJAZ Qatar
- Internal Security Force (Lekhwiya)
- Intesa Sanpaolo
- Investment Promotion Agency Qatar
- IT-Serve Oatar
- Jassim and Hamad Bin Jassim Charitable Foundation
- Katara Cultural Village
- Kearnev
- KPMG
- Mada Assistive Technology Center Qatar
- Malomatia

Mazars

MEEZA

Microsoft

Midis Group

- Mannai Microsoft Services
- Masraf Al Rayan

Mazaya Qatar

Marzoog Al Shamlan

McKinsey & Company

Ministry of Commerce and Industry

Ministry of Communications and

Information Technology

Ministry of Defense

Ministry of Education

Ministry of Finance

and Higher Education



QatarEnergy LNG

Ministry of Foreign Affairs

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Ministry of Labour

Mowasalat

Nakilat

(NCSA)

Nestlé

Ministry of Municipality

Msheireb Properties

and Research

North Oil Company

Oliver Wyman

One Foods

Ooredoo

Oryx GTL

PwC

PanData Tech

Qatar Airways

Qatar Biobank

Qatar Armed Forces

Oatar Cancer Society

Qatar Central Bank

Oatar Credit Bureau

Qatar Development Bank

Qatar Electricity & Water Co.

(O-Chem)

QatarEnergy

Parsons International

National Center for Cancer Care

National Cyber Security Agency

Northwestern University in Qatar

Omani Embassy in Doha, Qatar

Planning and Statistics Authority

Qatar Biomedical Research Institute

Qatar Business Incubation Center

Qatar Businesswomen Association

Qatar Computing Research Institute

Qatar Chemical Company Ltd

(National Planning Council)

Power International Holding

- Qatar Environment and Energy
- **Research Institute** Qatar Fertilizer Company
- Qatar Finance and Business Academy
- Qatar Financial Center
- Qatar Financial Center
- Regulatory Authority
- Qatar Financial Markets Authority
- Qatar First Bank
- Qatar Foundation
- Qatar Foundatiion Primary
- Health Care Center
- Qatar Fuel (WOQOD)
- Qatar Investment Authority
- Qatar Islamic Bank
- Qatar Mobility Innovation Center
- Qatar Museums
- Qatar National Bank
- Qatar National Research Fund Qatar Olympic Committee
- Qatar Petrochemical Company
- Qatar Red Crescent

(OAPCO)

Qatar Shell

Qatar Steel

QIC Group

QNB Capital

QInvest

- Qatar Research, Development and
- Innovation Council
- Qatar Science and Technology Park
- Qatar Solar Technologies
- Qatar Stock Exchange
- Qatar Tourism
- Qatar University
- QLife Pharma
- Queen Hospital
- Ras Girtas Power Company
- Regency Group Holding

- Rheinmetall Barzan Advanced Technology
- Roland Berger
- SAP
- SaVest
- Seib Insurance
- Sidra Medicine
- Siemens Oatar
- Silatech
- SLB (Schlumberger)
- Snoonu
- Social and Sport Contribution Fund (Daam)
- Soutien Group
- Sponix Tech
- Standard Chartered
- State Audit Bureau
- Supreme Committee for Delivery and Legacy
- Supreme Council for Economy and Investment
- Talabat
- TASMU Accelerator
- Teach For Qatar
- TESOL International Association
- Texas A&M University at Qatar
- Tivoli Group
- TotalEnergies Qatar
- Trio Investment
- UBS
- U.S. Embassy in Qatar
- VCUarts Qatar
- Vodafone Qatar
- Waldorf Astoria
- Weill Cornell Medicine-Qatar
- Wise Consultancy
- Wizard Cyber
- World Innovation Summit for Education (WISE)

About Carnegie Mellon University in Qatar

Carnegie Mellon University set its own course with programs that inspire creativity and collaboration. A private, top-ranked and global university, Carnegie Mellon looks beyond the traditional borders of the university campus to have a transformative impact locally, nationally, and globally. In 2004, CMU began a partnership with Qatar Foundation to bring this unique educational experience to the Middle East.

For 20 years, Carnegie Mellon University in Qatar has provided a world-class education in the heart of Education City. More than 1300 graduates have completed their education at CMU-Q, and more than 450 students are currently pursuing studies in biological sciences, business administration, computer science and information systems.

As the CMU-Q alumni network grows, so does the impact that we have on Qatar and the world. Our graduates work at top organizations and innovative startups. They influence government policy, analyze big data, bring culture and the arts to the community, and inspire young people to learn and innovate. They are researchers, creators, entrepreneurs, analysts and educators, and they are working to improve the world around them.



To learn more, visit www.qatar.cmu.edu and follow us on

G CarnegieMellonQ (O) @carnegiemellonq



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The Annual Report is produced by the Marketing and Public Relations team at CMU-Q. Photographs are courtesy of Carnegie Mellon University, Carnegie Mellon University in Qatar, and Qatar Foundation.

in Carnegie Mellon Qatar

CarnegieMellonQatar

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