# **ABOUT QCRI**

Established in 2010

QCRI-Affiliated Publications

700+

Lifetime Citations

140,000+

Active Patent Applications Filed

276

Copyright Protections

23

Field Weighted Citation Impact

2.89

Start-ups Created

4

New Invention Disclosures

118

**Patents Granted** 

43

Technologies Licensed to 3<sup>rd</sup> Parties

20

End-users of QCRI Public Systems

40,000+



Qatar Computing Research Institute (QCRI), one of three research institutes within Hamad Bin Khalifa University, was established in 2010 with a mandate to support Qatar's transformation from a carbon economy to a knowledge-based economy. In doing so, it fulfills Qatar Foundation's overarching objectives of empowering national and regional change.

QCRI's mission is helping to build Qatar's innovation and technology capacity. It is focused on tackling large-scale computing challenges that address national priorities for growth and development. QCRI conducts world-class multidisciplinary computing research that is relevant to the needs of Qatar, the wider Arab region, and the world. We perform cutting-edge, AI based research in such areas as Arabic language technologies, social computing, data analytics, and cyber security.

#### **Our Vision**

To be a global leader of computing research in identified areas that will bring positive impact to the lives of citizens and society.

#### **Our Mission**

To conduct innovative, multidisciplinary applied computing research that addresses national priorities by:

- ▶ Enhancing the quality of life for citizens
- ▶ Enabling broader scientific discoveries, and
- Making local businesses more competitive globally

### **Our Strategic Objectives**

- ▶ Research Excellence
- ▶ Local engagement and outreach
- ▶ Innovation and commercialization
- ▶ Enabling environment for research and innovation

# **OUR RESEARCH PROGRAMS**

## **Arabic Language Technologies**

Ensuring that the Arabic language flourishes in the digital world is a priority area of QCRI's research. We are dedicated to promoting the Arabic language in the information age. Some of our current research projects address the challenges related to lack of content and equally important, extracting that content, analyzing and transforming it.

Our Arabic Language Technologies research team is a world leader in the areas of speech recognition, machine translation and question answering.

## **Cyber Security**

We have decided to focus on the areas of cyber security that are the most important to Qatar and on segments of cyber security where existing expertise in related technologies can be leveraged and readily applied.

These priorities include:

- ▶ To predict, overcome and prevent the next generation of cyber-attacks on Qatar's critical infrastructure
- ▶ To ensure preparedness for emerging cyber threats is addressed as part of the nation's security

### **Data Analytics**

QCRI's Data Analytics Group research expertise transcends the data science stack - from data extraction and cleaning to analytics, retrieval, inference and prediction. Its task is to build robust ecosystems for data sciences and big data analytics, and develop highly scalable technologies in the areas of data curation, data fusion, measurement, analysis, discovery and visualization, and big data infrastructure.

The group expresses its research through engineering prototype software systems that are being used by researchers and practitioners globally.

## **Social Computing**

QCRI's Social Computing group performs multi-disciplinary research, combining computer science and social sciences to address problems of societal relevance.

Methodologically, our principal sub-areas are: (i) computational social science: studying human behavior at scale, (ii) social analytics: applying machine learning to social data to build models for various applications, and (iii) hybrid collaborative intelligence: supporting the collaboration between humans and machines for information processing tasks.

Thematically, our group is organized by application area: Health, Urban Computing, Crisis Computing and News. The researchers in each focus area work with local stakeholders to generate science and systems relevant to the region, while producing global impact.

## **Qatar Center for Artificial Intelligence**

Qatar Center for Artificial Intelligence (QCAI) supports QCRI's vision of becoming a global leader of computing research, in areas identified to make a positive impact in the lives of the Qatari people and society. QCAI aims to raise Qatar's profile as a global technology innovation hub.