Join the Innovation
Qatar Computing Research Institute (QCRI) is a national research institute established in 2010 by Qatar Foundation for Education, Science and Community Development. As a primary constituent of QF Research and Development, QCRI supports the mission to build Qatar’s innovation and technology capacity by focusing on large-scale computing challenges that address national priorities for growth and development.

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
- Excellent research programs
- Local engagement, outreach and technology transfer
- Capacity building
- Commercial impact
- Worldwide recognition and collaborations with leading international organizations
OUR RESEARCH PROGRAMS

Cyber Security

Threats analysis and mitigation
Analyze patterns and trends related to malware, botnets and other offensive computing technologies.

Cyber intelligence
Analyze the socio-economic aspect of cyber attacks using big data analytics and other techniques to understand attackers, their methods and trends.

ICS and SCADA
Develop technological solutions to address special unique cyber problems affecting Qatar’s critical infrastructure in key industrial sectors.

Arabic Language Technologies

Enabling information flow across language barriers
Retrieve Arabic language content and make it accessible through advanced exploratory search technologies, natural language processing, content generation and analytics.

Enriching Arabic digital content
Focus on closing the gap caused by the lack of valuable Arabic content on the web (Ethraa initiative).

Data Analytics

Robust ecosystem for data sciences and big data analytics
Build robust ecosystem for data sciences and big data analytics, and develop highly scalable technologies in the areas of data curation; data fusion; measurement, analysis, discovery & visualization; and big data infrastructure.

CYBER SECURITY GRAND CHALLENGE

Cyber security is an ongoing challenge—the science is ever-evolving and the attacks evolve along with the science. Important to the success of preparing and protecting Qatar against cyber vulnerabilities is basic and applied research that will create the new defensive and offensive technologies, and accelerate their introduction to practical use. QCRI will lead the nation’s research efforts in cyber security.
Distributed Systems
Cloud data infrastructure, scalable cloud analytics, HPC in the cloud
Improve the computation and data infrastructure available to users of computing clouds.

Sports Analytics
Develop new methods for evaluating the performance of teams and players in football with application to other sports.

Social Computing
Studying online media in multi-cultural societies
Analyze the social fabric, integration and tension in multi-cultural, multi-ethnic, multi-lingual societies.

Social computing for better health and well-being
Combine data from sensors, surveys and social media to implement culturally-aware interventions to reduce obesity and other health problems.

Analytics for journalism, online news and social media
Study the interplay between social media news and traditional news, to contextualize stories, to relate them to the reader, and to predict news consumption.

Computing for human development and crisis management
Use both online and offline data to quantify variables related to human development, economics, migration and crisis resilience.

Computational Science and Engineering
New research program with a focus on computational biology targeting cancer bioinformatics and systems biology of complex diseases. Plans to expand to large scale scientific and engineering simulations from energy and environment.
# QCRI IN FIGURES

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in</td>
<td>2010</td>
</tr>
<tr>
<td>Total Staff</td>
<td>140, including 120 research staff</td>
</tr>
<tr>
<td>Staffing plans through 2018</td>
<td>300</td>
</tr>
<tr>
<td>Number of peer reviewed publications</td>
<td>350+</td>
</tr>
<tr>
<td>Number of staff citations</td>
<td>100,000+</td>
</tr>
<tr>
<td>H-Index (senior researchers)</td>
<td>24.2</td>
</tr>
<tr>
<td>Patent families filed</td>
<td>72</td>
</tr>
<tr>
<td>Patent families granted</td>
<td>8</td>
</tr>
<tr>
<td>Software applications and platforms developed</td>
<td>35</td>
</tr>
<tr>
<td>Technologies licensed</td>
<td>4</td>
</tr>
<tr>
<td>Start-up launched</td>
<td>1</td>
</tr>
</tbody>
</table>

## OUR RESOURCES

- World-class scientists and local capabilities
- World-class research facilities
- Strong partnerships with international and local collaborators