

ENGINEERING FOR THE CYBER FUTURE



The University of Virginia's programs in computer science, computer engineering and systems engineering are internationally renowned because our researchers do not merely react to current technology demands. We are catalyzing humanity's cyber future.

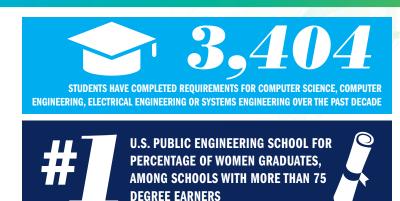
Core Research Competencies Include:

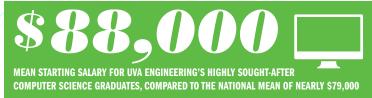
- Autonomous Systems
- Cyber-Physical Systems
- Cybersecurity
- High-Performance and Cloud Computing
- Human-Machine Interface
- Machine Learning
- · Privacy, Ethics and Fairness
- Software and Systems Engineering

Application Areas Include:

- Biomedical Data Sciences
- Business Data Analytics
- Environmental Monitoring
- Medical Devices and Robotic Surgery
- Smart Buildings and Cities
- Smart Health
- Self-Driving Vehicles

KEY FACTS ABOUT UVA'S CONTRIBUTIONS TO THE CYBER ECONOMY:





WOMEN MAJORING IN COMPUTER SCIENCE AT UVA, COMPARED TO 18 PERCENT NATIONALLY

AFFILIATED RESEARCH CENTERS AND INITIATIVES:

LINK LAB

A 17,000-square-foot, multidisciplinary research and development center for cyber-physical systems, with a focus on technologies for autonomous systems, smart health and smart communities. Link Lab includes more than 30 world-class researchers across five engineering disciplines and more than 200 graduate students, and provides innovative educational opportunities to hundreds of undergraduates.

CENTER FOR RESEARCH IN INTELLIGENT STORAGE AND PROCESSING IN MEMORY

Brings together researchers from 10 universities, led by UVA, to unlock the power of "big data" by removing the separation between memories that store data and processors that operate on the data. The \$29.6 million center is funded through the Joint University Microelectronics Program managed by the North Carolina-based Semiconductor Research Corporation, a consortium that includes engineers and scientists from technology companies, universities and government agencies.

MULTI-FUNCTIONAL INTEGRATED SYSTEM TECHNOLOGY CENTER

A National Science Foundation Industry-University Cooperative Research Center of industry, universities and government agencies to bridge computing technologies with new, advanced materials for the Internet of Things.

CYBER INNOVATION & SOCIETY

Focused on ensuring that the cyber systems being developed for everyday life are secure and operated for the benefit of mankind.

UVA SCHOOL OF DATA SCIENCE

Building upon the groundbreaking work of the Data Science Institute that was established in 2013, the University of Virginia has announced a \$120 million gift to establish a new school of data science. The school will support research and workforce development through undergraduate and graduate degrees in the field of data science, which has become a critical new frontier in efforts to solve global challenges.

INDUSTRY SECTORS:

CYBER-PHYSICAL SYSTEMS

CYBERSECURITY

DATA SCIENCES

HEALTH CARE

BUSINESS SYSTEMS

AUTONOMOUS SYSTEMS

ADVANCED MANUFACTURING

ADVANCED MATERIALS



