CYPHER
Cyber-Physical Intelligence and Security

NEWSLETTER

· DECEMBER 2020 ·

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https://web.uri.edu/cypher/

THE CYPHER CENTER
WOULD LIKE TO WISH YOU A

HAPPY
holidays

THE
UNIVERSITY
OF RHODE ISLAND
**COLLEGE OF
ENGINEERING**

CYPHER
Cyber-Physical Intelligence and Security

OUR MISSION

The Center is committed to advance fundamental research, technology advancement and transfer, as well as workforce and education development in broad domains of cyber-physical security and trustworthy artificial intelligence (AI).

The Center develops partnership among academic, industry, and government on innovations of cyber-physical systems and artificial intelligence, address the workforce gap and foster technology transfer with lasting impact

COLLEGE OF ENGINEERING
THE FASCITELLI CENTER FOR ADVANCED ENGINEERING

TAKE A LOOK AT OUR STATE OF THE ART LABS

Smart Grid Security Lab

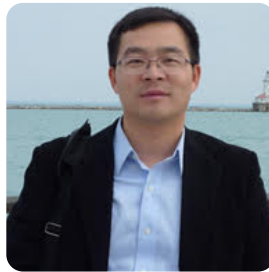Smart Networking and Computing (SNeC) Lab

MEET OUR FACULTY AND THEIR RESEARCH AREAS

Dr. Yu Bi
Research Areas:
- Hardware Security
- Integrated Circuits

Dr. Haibo He
Research Areas:
- Computational Intelligence
- Smart Grid

Dr. Yeonho Jeong
Research Areas:
- Power Electronics
- Hybrid Power Systems

Dr. Bin Li
Research Areas:
- Networking for Virtual/Augmented Reality
- Mobile Edge Computing

Dr. Hui Lin
Research Areas:
- Power Grid Security
- CPS Security

Dr. Resit Sendag
Research Areas:
- High-performance Computing

Dr. Manbir Sodhi
Research Areas:
- Optimization
- Industrial Automation

Dr. Paolo Stegagno
Research Areas:
- Intelligence Robotics
- Multi-agent Systems

Dr. Yan Sun
Research Areas:
- Power Grid Security
- Trust Modeling

Dr. Tao Wei
Research Areas:
- Sensing Technologies
- Hardware Security

Dr. Qing Yang
Research Areas:
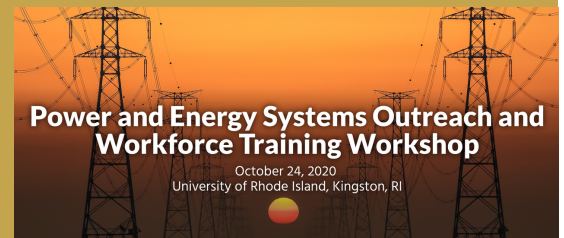- Computer Architecture
- Software-hardware Co-design

Dr.Chengzhi Yuan
Research Areas:
- Multi-robot Systems and Mobile Robotics
- Dynamic Systems and Control Theory

POWER AND ENERGY SYSTEMS OUTREACH AND WORKFORCE TRAINING WORKSHOP

URI hosted the one-day Power and Energy Systems Outreach and Workforce Training Workshop on Oct 24, 2020. This workshop focuses on outreach and knowledge development to meet the critical needs of the future workforce in the US power industry.

Power and Energy Systems Outreach and Workforce Training Workshop
October 24, 2020
University of Rhode Island, Kingston, RI

With over 180 registrations, this workshop features exciting presentations from experts in the field, information about the pathway to graduate school, professional engineering exam, career and co-op opportunities in the energy sector, job-hunting/interview skills under the COVID era, and many more.

CONGRATULATIONS TO DR. TAO WEI AND DR. QING YANG FOR WINNING AN NSF SECURE AND TRUSTWORTHY CYBERSPACE AWARD

URI is awarded $600,000 to research a new security technology that protects data confidentiality, data integrity, and correctness in computer systems. Specifically, the new technology is able to instantly detect malicious hardware attacks so that appropriate actions can be taken to prevent information from stolen and alteration when information is transmitted between components inside a computer system.

The new technology can be realized using a simple digital hardware as part of a computer system. One of the objectives of this project is to design, develop, and implement the new hardware structure to be incorporated in future secure computers. The PIs of this project are Dr. Tao Wei and Dr. Qing Yang. Congratulations!

CYPHER CENTER SPONSORED URI SECOND IMMERSE-A-THON EVENT FOR EXPLORING VIRTUAL/AUGMENTED APPLICATIONS BEYOND GAMING.

The Immerse-a-thon is a weekend design and maker-fest event for college students where they apply human-centered design to find solutions to real-world problems. The event supplies mentors, coaches, subject matter experts, team members,

THE UNIVERSITY OF RHODE ISLAND

Immerse-a-thon
September 26-27, 2020
3 tracks: Manufacturing, Education, Healthcare
All College Students and Majors
TOP TEAM AWARDED $1,000
Register now at uri.edu/hackathon
For VR / AR Design   2020

and plenty of food to support the student's work. At the end of the event, students get to pitch their solutions to try and win cash prizes to take their ideas to the next stage. Previous Hackathons have focused on Aging, IoT, Health, Virtual Reality, Mobility, and Clean Water.

Please visit https://web.uri.edu/cypher/ for the latest information