2018 NSF Research Experiences for Undergraduates (REU)
Secure and Privacy Preserving Cyber Physical Systems
JUNE 4—AUG. 10, 2018

This Summer Research Experiences for Undergraduates (REU) site, funded by NSF Division of Computer and Network Systems, focuses on cybersecurity challenges with applications in future smart cities and provides students with cybersecurity experiences.

Project Objectives
- Opportunities to conduct cybersecurity-related research and gain valuable experience in topics of national interest.
- Allow interns to self-assess their interest in cybersecurity and graduate studies.
- Learn advance subjects such as cryptography, anomaly detection, formal verification and hardware security.

Topic Areas
- Secure communication protocols for smart traffic management
- Secure protocols for electric vehicle communications
- Graph-based anomaly detection for smart power grid
- Formal security analytics for cyber physical systems
- Security and privacy enhancements at physical layer
- Addressing hardware insecurities in the encryption schemes of cyber physical systems
- Securing ubiquitous programmable logic controllers (PLCs) in cyber physical systems
- Artificial intelligence based diagnosis of sensor networks

Eligibility
- U.S. citizen or permanent resident
- Electrical engineering, computer/software engineering, computer science or any other related disciplines with a 3.25 or higher GPA
- Sophomore, junior or senior
- Must graduate after September 2018

Application Process
- Transcripts
- Application form
- Two recommendation letters
- Personal statement
- Resume
- See website for more details

Application Deadline
March 2, 2018

Applications Available Online
www.tntech.edu/engineering/reu

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Award Information
- $5,000 stipend for 10 weeks
- On-campus housing included
- Food allowance
- Round-trip travel expenses up to $600
- The total is approximately $8,000

Announcement of Awards
March 20, 2018

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