BRYAN PEARSON

PERSONAL INFORMATION

University: University of Central Florida

College Unit: College of Engineering and Computer Science (CECS)

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BIOGRAPHY

Bryan Pearson joined the Department of Computer Science at the University of Central Florida as a Ph.D student in August 2018, under the supervision of Dr. Xinwen Fu. He received his B.S. in Computer Science from Stetson University (2014), with minors in Physics and Mathematics.

Bryan's research interests include security and forensics of wireless sensor networks (WSN) and Internet of Things (IoT) systems, networking quality of service (QoS), and IoT scalability. He has been publishing in several conferences and journals including IEEE International Conference on Communications, MDPI Sensors, and IEEE International Conference on Computing, Networking and Communications (ICNC).

EDUCATION

University of Central Florida

August 2018 - Present

Ph.D in Computer Science

Focus: Internet of Things (IoT) security

Advisor: Dr. Xinwen Fu

Stetson University May 2018 B.S. in Computer Science GPA: 3.507 / 4.000

Minors in Math and Physics Advisor: Dr. Daniel Plante

RESEARCH INTERESTS

- IoT security and forensics
- Applications and solutions of WSN and IoT
- Networking and computer systems QoS
- Light cryptography implementation and optimizations

WORK EXPERIENCE

Graduate Assistant August 2018 - Present

Florida IT Pathways to Success (Flit-Path)

Graduate Research Assistant

August 2018 - August 2019

University of Central Florida, Department of Computer Science

Instructor June 2017 - July 2018

ID Tech Camps

Clerical Assistant

May 2017 - June 2018

Stetson University, Departments of English/Computer Science

SCHOLARSHIPS AND GRANTS

University of Central Florida

IEEE ICC NSF Student Travel GrantApril 2019Graduate Presentation FellowshipFebruary 2019Graduate ORC Doctoral FellowshipAugust 2018Flit-Path NSF GrantAugust 2018

Stetson University

Presidential Scholarship Federal Pell Grant Bright Futures FASA

August 2014 - May 2018 August 2014 - May 2018 August 2014 - May 2018

ACADEMIC ACTIVITIES

Committee Membership

1. Web Chair, Secure Comm Organizing Committee

2019

PUBLICATIONS

- 1. C. Gao, L. Luo, Y. Zhang, B. Pearson, X. Fu. Microcontroller Based IoT System Firmware Security: Case Studies. *In proceedings of IEEE International Conference on Industrial Internet (ICII)*, Orlando, FL, Nov. 2019.
- 2. B. Pearson, L. Luo, Y. Zhang, R. Dey, Z. Ling, M. Bassiouni, and X. Fu. On Misconception of Hardware and Cost in IoT Security and Privacy. *In proceedings of IEEE International Conference on Communications (ICC)*, Shanghai, China, May 2019.
- 3. L. Luo, Y. Zhang, B. Pearson, Z. Ling, H. Yu, and X. Fu. On the Security and Data Integrity of Low-Cost Sensor Networks for Air Quality Monitoring. *Sensors (Basel)*. Dec. 2018.
- 4. N. Domingo, B. Pearson, and Y. Jin. Exploitations of Wireless Interfaces Via Network Scanning. *In proceedings of IEEE International Conference on Computing, Networking and Communications (ICNC)*, Santa Clara, CA, 2017.

TECHNICAL SKILLS

Languages: C, Python, Java, MatLab, PHP, JavaScript

Software: Arduino IDE, ESP-IDF, Mongoose OS, AWS, Google Cloud, Node.js, Apache, Nginx, Spark, Docker

REFERENCES

Dr. Xinwen Fu

Associate Professor of Computer Science

University of Central Florida

Email: xinwenfu@ucf.edu

Dr. Daniel Plante

Professor of Mathematics and Computer Science

Email: dplante@stetson.edu

Stetson University