Xuan Feng

Curriculum Vitae

Institute of Information Engineering, Chinese Academy of Sciences University of Chinese Academy of Sciences, **RPC**

Smartphone: 185 0041 0329

Brief Bio

I am a Ph.D. candidate at University of Chinese Academy of Sciences. I major in cyber security and my research brings a data-driven approach to the study of computer and network security. My work focus on defending the Internet's physical core infrastructure, and guide the design and deployment of widely-used physical systems.

To date, I have worked on device discovery and identification of embedded systems and industrial control systems for 2 years and gained a lot of project experience. The primary objective of my work is to develop algorithms and systems for Industrial devices in the cyber space. To be able to identify the right problems, I need a deep understanding of several areas. It also requires strong capabilities to translate algorithms into the meaningful implementations. Both my research record and potential are on par with the best systems students in the Chinese academic science.

Education

2014-Preset **PhD Student in Cyber Security**, *Institute of Information Engineering*, Chinese Academy of Sciences.

Data-driven Security, Advisor: Prof. Limin Sun

2014-2016 Master's Level Computer Science Courses, Institute of Information Engineering, Chi-

nese Academy of Sciences.

Coursework for professional development

2010–2014 Bachelor's degree in Telecommunications Engineering, Xidian University.

Graduated with High Honor

——— Project

2014-Present National Natural Science Foundation.

Research on physical device discovery: collecting and analysing devices' characteristic

2014-Present State Key Development Program of Basic Research.

Physical device fingerprinting: extracting device information and profile it using fingerprint

2013-2014 National Undergraduate Electronic Design Contest.

design/implemented the hardware and software and won first prize in Shaanxi Division

Awards and Honors

- o Merit Student of University of Chinese Academy of Sciences, 2016
- o Outstanding graduates of Xidian University 2014
- The first-class scholarship of Xidian University 2010-2013
- o First prize of Shaanxi Division of National Undergraduate Electronic Design Contest

Computer skills

Languages Java, Python, R, C/C++

Platforms MCU, Linux, windows
Tools Pandas, Scikit-learn, NLTK

——— Publications

- [1] Xuan Feng, Qiang Li, Haining Wang, Limin Sun. "Characterizing Industrial Control Equipments on the Internet." IEEE International Conference on Network Protocols (ICNP'16).
- [2] Qiang Li, Xuan Feng, Zhi Li, Haining Wang, Limin Sun. "GUIDE: Graphical User Interface Fingerprints Physical Devices" IEEE International Conference on Network Protocols (ICNP'16) Poster.
- [3] Xuan Feng, Qiang Li, Haining Wang, Limin Sun. "ASCEND: A Search Engine for Online Industrial Control Devices." IEEE International Conference on Network Protocols (ICNP'16) Demo.
- [4] Xuan Feng, Qiang Li, Qi Han, Hongsong Zhu, Yan Liu, Limin Sun. "Identification of Visible Industrial Control Devices at Internet Scale." IEEE International Conference on Communications (ICC'16).
- [5] Xuan Feng, Qiang Li, Qi Han, Hongsong Zhu, Yan Liu, Jie Cui, Limin Sun. "Active Profiling of Physical Devices at Internet Scale." IEEE International Conference on Computer Communication and Networks (ICCCN'16).