122 Newbury Hollow Ln, Apt10
Syracuse NY 13210

Ju Chen

(585) 434-8060
chenju2k6@gmail.com
http://chenju2k6.github.io

Short Biography

- Ju Chen is currently a third-year Ph.D. student in Computer Science at Syracuse University. He has worked in Intel for six years as a software engineer. His research work has been published in SecureComm, IEEE Cloud, SysTex, etc. His research interest lies in computer systems and cyber-security. His research work usually involves writing systems-level code and integrating with complex systems.

Publications

- Qiwu Zou, Yuzhe Tang, **Ju Chen**, Kai Li, Charles Kamoua, Kevin Kwiat, Laurent Njilla. "ChainFS: Blockchain-Secured Cloud Storage", IEEE Cloud 2018
- K. Areekijseree, Yuzhe Tang, **Ju Chen**, Shuang Wang, Arun Iyengar and B. Palanisamy. "Secure and Efficient Multi-Party Directory Publication for Privacy-Preserving Data Sharing." SecureComm 2018, AR=30.6%
- Yuzhe (Richard) Tang, Zihao Xing, **Ju Chen**, Cheng Xu and Jianliang Xu. "Lightweight Logging over the Blockchain for Data-Intensive Applications", 2nd Workshop on Trusted Smart Contracts 2018 at Financial Cryptography (Workshop paper)
- **Ju Chen**, Yuzhe (Richard) Tang and Hao Zhou. "Strongly Secure and Efficient Data Shuffle on Hardware Enclaves", SysTex 2017 at ACM SOSP (Workshop paper)
- Yuzhe Tang and **Ju Chen** "Log-structured Authenticated Cloud storage with minimal trust using Intel SGX", Technical Report (https://eprint.iacr.org/2016/1063.pdf)
- John Ye, **Jason Chen**, Tianzhou Chen and Qinsong Shi, "Conflict-Free Code Block Scheduling to Hide SpMT Inter-Core Register Sync Delay", PDCAT '14
- John Ye, **Jason Chen**, Tianzhou Chen, Minghui Wu and Li Liu, "Offline Data Dependence Analysis to Facilitate Runtime Parallelism Extraction", CSE '14
- **Ju Chen**, Qi Zhao and Jinming Dong, "Research on kernel encoding function of H.264 CODEC JM8.6", Computer Engineering and Design 2008-17

Project Experiences

- **Miscellaneous projects**
  - Intel SGX emulator by Linux Kernel module (GitHub repo)
  - Query Optimization in PostgresSQL for federated databases
- **Early projects**
  - Intel's display driver. Intel display driver is used by Laptops, Desktops and Portable devices equipped with Intel CPUs. Ju Chen was the member of the core development team. (Source Code)
  - USB-over-IP protocol.
  - USB gadget driver in Linux for Intel's low-power platforms.

Research and Teaching

Research Assistant **Syracuse University** **Fall 2015 - Present**
- Research Interests: Cyber-security, Cloud computing and Operating systems
- Current Research: Data-oblivious query processing and Verifiable cloud storage.

Teaching Assistant **Syracuse University** **Spring 2017 - Present**
- Teaching assistant for CIS655 - Advanced Computer Architecture (course website).
- Teaching assistant for CIS/FIN600 - Blockchain and Cryptocurrencies (course website)
- Designed homework, labs, and exams. Conducted lectures. Hosted help sessions for students.

Education

Syracuse, NY **Syracuse University** **Fall 2015 – Present**
- Ph.D. candidate in Computer Science. GPA: 3.88
- Graduate Coursework: Computer Security; Cloud Computing; Operating systems; Applied Cryptography;

Beijing, China **Beihang University** **Fall 2001 – Spring 2008**
- Bachelor and Master in Electrical Engineering

Employment

- **Spring 2008 - Fall 2015:** Software Engineer, Intel Corporation, Beijing, China
- **2007:** Software Engineer Intern, Agilent Technologies, Beijing, China

Awards and services

- **2017:** iDash 2017 Student Travel Grant
- **2009:** Intel Division Recognition Award
- **Conference Reviewer:** TKDE and ICPADS

Skills

- **Software:** Rich experiences in complex system-level softwares such as Operating Systems (e.g. Linux Kernel, Android), Database Management Systems (e.g. PostgresSQL, LevelDB) and Blockchain (e.g. Ethereum)
- **Programming Languages:** C/C++ and Java
- **Tools:** GNU make, GDB and Git