Deyu Han

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Education

Carnegie Mellon University, Pittsburgh PA May 2018
Master of Science, Information Technology - Information Security
Relevant Courses: Computer Systems, Applied Info Assurance, Algorithm Design, Networking, Mobile Security
Knox College, Galesburg IL June 2016
Bachelor of Arts, Honors in Computer Science Minor: Mathematics

Skills

Programming Experience: 8 years programming experience, Proficient in Java, C++, Unix, Linux, and Bash Scripting. Familiar with C, Python, Docker, Nginx, Scala, JavaScript, Haskell, MySQL, HTML, OpenGL.
Language: Proficient in English and Mandarin, elementary level in German.

Research Experience

Mediated Fog Computing Model for Proximal Domain Security in IoT Summer 2017
- Improved data transmission efficiency for facial recognition component

Honors: Improving Valiant routing for Slim Fly HPC Network Topology 2015&2016
- Designed and implemented a Java HPC simulator for Slim Fly topology
- Improved around 11% performance for worst-case traffic in Slim Fly HPC topology

Task Mapping for Emerging Network Topologies (NSF: CNS-1423413) 2015&2016
- Main developer and advisor to implement a HPC simulator for Dragonfly
- Leader of 3 teammates, improved 2% of the performance of HPC simulator by using new algorithms

Relevant Work Experience

Cisco, Security Business group Fall 2017
Practicum with Cisco on Web app attacks detection in real-time
- Performed 4 (SQLi, XSS, Format String Overflow, Local File Injection) of OWASP top 10 attacks on cloud services
- Analyzed existing two Web Application Firewall and two Run-time Application Self Protection solutions

Knox College Theater Department 2015-2016
Web Developer
- Maintained and did weekly events update. Available at: departments.knox.edu/theatre/index.html

Academic Projects

- Implemented a LRU-based memory cache simulator in C with optimization Fall 2016
- Implemented a simple Linux shell with job, multiple signals, control and I/O redirections Fall 2016
- Implemented malloc in C using BST and explicit list Fall 2016

Conference Presentations

46th International Conference on Parallel Processing (ICPP) August 2017
- Presented Improving Valiant Routing Algorithms for Slim Fly Networks

Consortium for Computing Sciences in Colleges (CCSC) conferences 2015
- New developed task mapping and global link arrangement with a simulator for Dragonfly
- Scala and Charm++ with 2 sample programs at CCSC-Midwest

45th ACM National Special Interest Group on Computer Science Education (SIGCSE) March 2014
- Presented a poster & abstract: Parallel Programming Paradigms Illustrated for SIGCSE2014

Honors & Awards

- **CCSC Conference**: 1st of 50 in poster session and 5th of 50 in programming contest 2014-2015
- Top 3 in liberal arts college, leading at Regional level in the ACM/ICPC Programming Contest 2014-2015
- Nominated as associate member of Sigma Xi, a scientific research honor society 2014-2016