SHENGHUI YANG

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🎓 EDUCATION

University of Pittsburgh, Pittsburgh, PA   2017 – Present
M.S. in Information Science (IS), GPA 3.87/4.00, expected May. 2019

East China University of Political Science and Law, Shanghai, China   2013 – 2017
B.S. in Computer Science (CS), GPA 3.30/4.00

👥 EXPERIENCE

Clinical and Translational Science Institute Pittsburgh, PA   Jun. 2018 – Present
Summer Intern Manager: Johne Rzodkiewicz Title: Full Stack Developer

- Setup Event Registration System using ASP.NET and Database using MSSQL
- Optimize network speed by using React.JS and simplify DB queries (Time Cosuming: 50%)
- Build up CMS (content management system / Umbraco) for internal usage

CyRen Lab Pittsburgh, PA   Mar. 2018 – Present
Research Manager: David Thaw Title: Research Assistant

- Deploy multiple systems on Xen and used Snort and pfSense as intrusion prevent and detect system to build a distributed honeynet
- Use methodology of machine learning to emulate human's activity towards a website to confuse hacker

Zhong Ta Network Technology Co., Ltd Shanghai, China   Jun. 2016 – Sept. 2016
Summer Intern Manager: Bingbing Wang Title: Web Developer

- Build up ThinkPHP framework for backend program and partitioning tables to improve searching speed
- Normalize tables to third normal form to prevent massive loading
- Serve as departmental Linux Systems Administrator, develop shell scripts to improve working efficiency

👥 PROJECTS

Tiny Web Server   Jun. 2016 – Sept. 2016
C, Linux Individual Projects

Brief introduction: A http Server coding in C, Improved it by adding concurrency feature
- Fully support for serving multiple client with static and dynamic pages at the same time
- Allow people writing dynamic web page using C programming language

Operating System Kernel   Sept. 2017 – Nov. 2017
C, Assambly Individual Projects

Brief introduction: Fully functional OS Kernel like Unix, based on knowledge learned in CS:APP
- Deploy memory management (include DMA), file system (FAT), process management, and hardware drivers (e.g. keyboard)
- Optimize file system by using tree structure, making time complexity of searching file be $O(\log N)$ rather than $O(N)$
- Add security properties to file system and memory management in case of unauthorized access and bufferoverflow

Cryptology Suite   Dec. 2017 – Mar. 2018
Python Individual Projects

Brief introduction: Based on Cryptology Algorithms, developed a suite for encryption and decryption
- Provide DES, 3-DES, AES and PKI (RSA) cryptosystem within this suite, also with Message-Digest Algorithm (MD5, SHA-256)
- Optimize the program using table lookup instead of calculating (Time Consuming: 5%)

⚙ SKILLS

- Programming Languages: C == Python > Java == C# == shell > HTML == JavaScript == PHP
- Framework: Spring(Java), ThinkPHP(PHP), Express(Node.js), Django(Python), ASP.NET(C#)
- Cloud: MapReduce, Big Table, Cassandra, Hadoop, Pig Latin, Spark

ℹ MISCELLANEOUS

- ⌨ https://github.com/supermartinyang