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SKILLS

Languages: Java, Python, JavaScript, C++/C, PHP, HTML, GoLang, SQL, Solidity
Tools & Frameworks: Git, Bash, Chrome DevTools, Jenkins, Nagios, Elk Stack, Node.js, Mocha, Chai, jQuery, AJAX, MongoDB, MemcacheD, MySQL, Kafka, AWS(EC2), Nginx, Blockchain Smart Contract, Penetration Test, TCP/IP Sockets, Tensorflow(Keras), PyTorch, Scikit-Learn, Scrapy

EDUCATION

Cornell University, Ithaca, NY **Expected May 2019**
Master of Engineering in Electrical and Computer Engineering, **GPA: 3.82/4.00**

Tianjin University, Tianjin, China **Aug. 2013-Jul. 2017**
Bachelor of Science in Measuring and Control Technology and Instruments (EE), **GPA: 3.60/4.00**, **Rank: 30/138**

WORK EXPERIENCE

Zingbox Inc., *SDE Intern* @ Mountain View, CA **Aug. 2018-Current**
- Cooperate with UI/UX team to design web APIs using JavaScript under Node.JS by leveraging MongoDB
- Add new features, filters, and sorting functions into the original application's inventory list page
- Design unit tests for RESTful APIs with Mocha and Chai utilizing promises
- Develop background Cron jobs in Python to handle real-time data stream via Kafka

Newsky Security Solution Inc., *SDE Intern & Blockchain Researcher* @ Redmond, WA **May 2018-Aug. 2018**
- Deployed a highly scalable server monitor system with Nagios from scratch for an IoT security application, and responsible for migrating the services among different cloud servers
- Co-developed a honeynet (Cowrie and Kako) threat intelligence system, pipelined each honeypot's logs with Filebeat, aggregated and filtered logs in a centralized Logstash, and managed with ElasticSearch
- Designed honeynet intelligence database's APIs in GoLang and Python, delivered data in a timely manner
- Deployed open-source crypto-exchanges with Docker and AWS EC2, and conducted the web penetration tests
- Published Medium tech blogs for company's blockchain branch *Haloblock*, and got 800+ applauses in sum

National Research Institute of Highway Ministry of Transport, *SDE Intern* @ Beijing, China **Dec. 2016-May 2017**
- Developed a computer-vision based dynamic measuring system for asphalt pavement's permeability coefficient from scratch, on both the hardware and software (Visual Studio + OpenCV)
- Implemented dynamic image processing (optimized algorithm to process less than half of IFS), servo tracking, data visualizing, and equipment calibrating; Integrated them into a UI-based software (Visual Studio MFC)
- Improved system's relative uncertainty from 15% to 6.28%, 1/3 of the technical specification requirements

RELEVANT PROJECTS

Degree Project: Cloud Application Benchmarking System Leveraging ML, Cornell University **May 2018**
- Set up tracing on a Netflix-like distributed application deployed with microservices (Apache Thrift) architecture
- Collected end-to-end traces by inserting timestamps around each microservice with Thrift logger and TCPdump
- Generated ideal CPU allocation ratio for Nginx load-balancer design, based on CPU% and tail latency statistics
- Utilized deep Neural Network to predict (less than 100ms) Quality of Service violations before they could occur

Embedded OS project: Smart Door System, Cornell University **Dec. 2017**
- Built a door-lock system on Raspberry Pi, with touch screen GUI and a webpage interface for remote control
- Set up server on R-Pi (Python Flask) to support front-end webpage and restored admin info in local DB (MySQL)
- Designed APIs for video-streaming, visitor verifying, voice mailbox, and door lock's remote control
- Speeded up face recognition to run at 15 FPS with multi-core parallelizing, 3X faster than single-core design

A Multi-threaded Key-Value Store Server, Cornell University **Oct. 2017**
- Designed a multi-thread doc-oriented database server (Python) with RESTful APIs, TTL, and disk-optimization
- Maintained a 32-thread pool to serve multiple clients, and a queue for pipelining client's requests sequentially

Online To-do List Calendar, Udemy **June 2018**
- Built a calendar-based to-do list application from scratch, self-designed front-end with CSS and jQuery
- Constructed back-end database with MySQL, and coordinated their logic with PHP and AJAX