

Haocheng Liu

R&D ENGINEER

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Education

Carnegie Mellon University

M.S. IN MECHANICAL ENGINEERING

Pittsburgh, PA

Aug. 2014 - May. 2016

- Graduate research assistant, Visual Design and Engineering Lab
- Teaching assistant, Artificial Intelligent and Machine Learning

Shanghai Jiao Tong University

B.S. IN MECHANICAL ENGINEERING

Shanghai, China

Sep. 2010 - June. 2014

- Outstanding graduate of Shanghai Jiao Tong University
- Full NTU exchange scholarship from Singapore Temasek Foundation

Experience

Omnious. Co., Ltd.

SOFTWARE ARCHITECT

Seoul, S.Korea

Jun. 2017 - May. 2018

- Provisioned an easily manageable hybrid infrastructure(Amazon AWS + On-premise) utilizing IaC(Infrastructure as Code) tools like Ansible, Packer and Terraform.
- Built fully automated CI/CD pipelines on CircleCI for containerized applications using Docker, AWS ECR and Rancher.
- Designed an overall service architecture and pipelines of the Machine Learning based Fashion Tagging API SaaS product with the micro-services architecture.
- Implemented several API microservices in Node.js Koa and in the serverless AWS Lambda functions.
- Deployed a centralized logging environment(ELK, Filebeat, CloudWatch, S3) which gather log data from docker containers and AWS resources.
- Deployed a centralized monitoring environment(Grafana, InfluxDB, CollectD) which gather system metrics as well as docker run-time metrics.

SAMSUNG Electronics

FREELANCE PENETRATION TESTER

S.Korea

Sep. 2013, Mar. 2011 - Oct. 2011

- Conducted penetration testing on SAMSUNG KNOX, which is solution for enterprise mobile security.
- Conducted penetration testing on SAMSUNG Smart TV.

Skills

DevOps	Linux, Windows, Multi threading, Meta programming, Docker, GDB, Vagrant, AWS
Framework	Qt, Google Testing, Visual Studio, Spack, Ansys APDL, Meshlab
Software	Meshlab, Ansys WorkBench, Ansys APDL, Solid works, Tetgen
Programming	C++, CMake, Python, Git, Bash, LaTeX, Java, Fortran