

Shao-Hung (Tom) Chiu

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WORK EXPERIENCE

Latitude AI, Pittsburgh, PA

Software Engineer II

Feb. 2023 – Now.

- Developed C++ applications, Python software cache server, and ansible playbooks to support Ford's hands-free and eyes-off L3 ADAS systems.
- Integrated software update workflow on procedural test frameworks to enable faster iterations and raise productivity for software development.
- Managed and packaged toolchains and libraries in Bazel for ARM64 and X86 architecture to enable hermetic builds for executables.

Argo AI, Pittsburgh, PA

Software Engineer I and II

Jan. 2021 – Feb. 2023

- Built the production-intent deployment software infrastructure in C++ and Python to support hundreds of fleet operations on daily basis.
- Developed deliverable packages for the onboard agent to fetch resources from cloud, to apply firmware updates, and to execute autonomy application on vehicles.
- Maintained the offboard deployment server which is integrated with Slack, Prometheus, PostgreSQL, S3, and AWS EKS to enable the deployment pipeline.

Technology for Effective and Efficient Learning (TEEL) Lab, Pittsburgh, PA

Intern

May. 2020 – Aug. 2020

- Developed extended microservice features on Auto-Grading Service using Azure Front Door, Azure Kubernetes and Azure CI/CD Deployment Pipeline to ensure robustness of services
- Delivered Data Engineering course project introducing Apache Spark and Azure Databricks with contexts, reference documents, starter code and interactive project evaluation systems for college-level Computer Science education

ASPEED Technology Inc., Hsinchu, Taiwan

Intern

Jul. 2018 – Aug. 2018

- Researched Super Resolution algorithms, assisted ASPEED to analyze and evaluate potential IP usage, and illustrated domain-specific algorithms and heterogeneous architecture by giving a talk to 30 staff members in ASPEED

SKILLS

Programming Languages: C/C++, Python

Frameworks: Docker, Kubernetes, Azure, AWS, GCP, Spark

Databases: PostgreSQL, MySQL, HBase, MongoDB

Tools: Bazel, Linux OS, gRPC, Ansible Playbook

EDUCATION

Carnegie Mellon University, Pittsburgh, PA

Master of Science in Electrical and Computer Engineering

Aug. 2019 – Dec. 2020

National Tsing Hua University, Hsinchu, Taiwan

Bachelor of Science in Electrical Engineering

Sep. 2015 – Jan. 2019

ACADEMIC PROJECTS

Cloud Computing Projects, Pittsburgh, PA

Carnegie Mellon University

Jan. 2020 – May. 2020

- Constructed full-stack Twitter recommendation systems based on 1TB Twitter data implemented by Spark, MySQL Database, and NoSQL Database
- Deployed cloud infrastructures using Infrastructure as Code such as Terraform to achieve efficient cloud service management

Self-Driving Car with Raspberry Pi, Hsinchu, Taiwan

National Tsing Hua University

Jan. 2018 – Jan. 2019

- Developed a lane following algorithm achieving prompt controls up to 6 frames per seconds by utilizing OpenCV and NumPy polynomial functions with Python 3.5 and integrated into a system with XBEE, MobileNet, and positioning algorithms
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