Zhansong Li

lizhansong@hvariant.com
GitHub: github.com/hvariant
LinkedIn: linkedin.com/in/zhansongli

latest version:

Education

- **Australian National University** — Canberra, Australia
  Master of Computing — *Feb. 2016 – Nov. 2017*
  - GPA: 6.25/7.0
  - Specialisation: Artificial Intelligence
- **Sun Yat-sen University** — Guangzhou, China
  Bachelor of Science in Computer Science and Technology — *Sep. 2011 – Jul. 2015*
  - GPA: 3.7/4.0

Work Experience

- **Integrated Research Ltd.** — Sydney, Australia
  DevOps Engineer — *Dec. 2019 – Present*
  - Worked on supporting the deployment and monitoring of a new analytics platform based on AWS serverless technologies
  - Worked with development teams to maintain and improve the AWS deployment process, including Jenkins scripts, infrastructure management, tag/branch management strategies, runbooks
  - Added structured logging to AWS lambdas written in TypeScript and Python to enable log analysis such as correlation ID tracking with centralised log management
  - Developed an aggregation and reporting service using Python which automatically generates biweekly reports about cost breakdown and user demographics

  Software Engineer — *Jan. 2018 – Nov.2019*
  - Worked on the on-premise payments and unified communication monitoring software IR Prognosis, mainly using C++ and C#
  - Worked on replacing the legacy build system with modern CMake which reduced build time for the on-premise software from 10 hours to 1 hour
  - Added support for Cisco CSR 12.5 and Audiocodes Mediant SBC 7.20 monitoring for the on-premise software, including new metrics and call quality visualisation in the C# web GUI
  - Worked on adding new merchant field and mapping rules for payment transaction records to enable merchant acquirers to monitor and breakdown transactions by merchants

- **Carbon Reduction Optimiser (ANU TechLauncher)** — Canberra, Australia
  Intern — *Mar. 2017 – Oct. 2017*
  - Analysed building energy consumption data and identified several key performance indicators for building energy consumption
  - Produced a model using Python and scikit-learn that can predict building energy consumption and breakdown based on a short survey

Certification

- **AWS Certified Solutions Architect - Associate**   Feb. 2020 – Feb. 2023

  - Description: The AWS Certified Solutions Architect - Associate exam is intended for individuals with experience designing distributed applications and systems on the AWS platform.
  - Credential ID: AWS00697844

Projects

- **Concurrent Garbage Collection in Java**

  - A more concurrent implementation of the RCImmix reference counting garbage collector for the research JVM JikesRVM
  - Reduced pause time introduced with buffered reference counting while maintaining similar throughput by performing part of the stop-the-world phase concurrently

- **Panoramic Stitching**

  - Developed a C++ program (based on OpenCV) to produce panoramic images based on videos

Skills

- **Programming Languages**

  - Proficient: C++, TypeScript, Python, C#, Java
  - Familiar: Rust, Haskell

- **Software**

  - Proficient: Git, Vim, Visual Studio, Jenkins, TeamCity
  - Familiar: Ansible, Terraform