Julia Zeng

Bellevue, WA Phone: 214-538-7823 Email: jwz28@cornell.edu

Education

CORNELL UNIVERSITY **2021-2025**

- College of Engineering
- **Major:** Computer Science
- **GPA:** 3.82/4.30
- **Coursework:** Algorithms, Functional Programming, Databases, Machine Learning, Operating Systems, Information Retrieval, Data Visualization, Linear Programming, iOS/Android Development, Backend Development

Skills

- **Java**
- **Python**
- **Javascript**
- **Swift**
- **Kotlin**
- **OCaml**
- **ReactJS**
- **Flask**
- **SQL**
- **Docker**
- **Puppet**
- **Git**
- **Postman**
- **Google Cloud Platform**

Experience

SERVICE RELIABILITY ENGINEERING INTERN @ ERICSSON Jun 2024 - Present

- Streamline and implement incident management workflow in Google Cloud Platform for a cloud native 5G core network to enable faster resolution times in order to uphold service-level agreements and objectives
- Build up knowledge base articles to be utilized by AI-based proactive pipelines for fault detection
- Configure automated incident creation and instantaneous alerting based on network connectivity measures

HUMAN WASTE RECYCLING RESEARCH Aug - Dec 2023

- Optimized placement and circulation of Kon-Tiki kilns around an Kenyan slum city using computer vision-backed map analysis and models of the facility location optimization problem and set partitioning in order to maximize efficient repurposing of human waste into rich fertilizer

INFRASTRUCTURE AUTOMATION INTERN @ T-MOBILE May - Aug 2023

- Migrated server configuration modules from GitHub to GitLab and performed regression testing on servers
- Found differences in modules located in build, production, and patching environments using Ruby and Git
- Added CI/CD pipeline schedules to GitLab repositories using Python and GitLab API
- Deployed and tested build pipeline code release to ~40,000 production servers

CORNELL APPDEV HACK CHALLENGE April 2022, April 2024

- Built backend for mobile app that connects student tutors and tutees across campus, allowing users to input preferences and schedule tutoring service
  - Used Python Flask, RESTful APIs, and SQLite; deployed using Docker
- Developed frontend using Swift for iOS scheduling app that finds optimal event times according to overlapping availability between users

RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU) @ IUPUI Jun - Aug 2022

- Evaluated literature on the use of mmWave radar and point cloud generation in human gesture recognition
- Compared performance of machine learning algorithms in classifying high and low quality point cloud images based on 3D spatial coordinates

MATHEMATICAL CONTEST IN MODELING Nov 2022, Nov 2023, Feb 2024

- Devised optimal traffic patrol schedule using K-Means Clustering analysis of historical collision data
  - *Earned Honorable Mention at Cornell MCM (2022)*
- Simulated invasive fly population in vineyard over time upon application of optimally chosen insecticide
  - *Earned Finalist at Cornell MCM (2023)*
- Trained model to predict shifts in momentum in tennis games based on live status of players' performance
  - *Earned Honorable Mention at International MCM (2024) - top 31% of participants*