Alan Zhang

alanmz2002@gmail.com ❖ (650) 815-5119 ❖ Palo Alto, California

OBJECTIVE

Looking for a software engineering position with real-world impact

EDUCATION

Rose-Hulman Institute of Technology   **Sept 2021 – May 2024**
Bachelor of Science, Computer Science | Minors in Cognitive Science and Philosophy   *Terre Haute, IN*
- Magna Cum Laude, 3.75/4.0 GPA
- Took Design and Algorithm Analysis, Software Design, Database Systems, Software Requirements Engineering, Operating Systems, Artificial Intelligence, Deep Learning, Image Recognition, Computer Architecture II
- Involved in Residence Hall Association, Computer Security Club, Intramural Sports, Badminton Club

EXPERIENCE

Kura AR   **June 2023 – July 2023**
Software Development Intern   *SF Bay Area, CA*
- Developed Proof-of-concept augmented reality applications
  - Integrated Windows display drivers and 3rd party drivers within Unity scenes for innovative 3D AR virtual desktop experiences

Inuvo   **June 2022 – May 2023**
DevOps Intern   *San Jose, CA*
- Created and managed Prometheus and Datadog alerts for backend servers
- Monitored and automated AWS usage
  - Automated spreadsheet generation for reviewing inactive users and instances using Bash scripting
  - Created lifecycle rules for cloud storage, cutting daily costs by more than 30%
- Initialized and automated firewalld setup for new Redis Docker containers through Jenkins

Paly Robotics   **Sept 2017 – May 2021**
Software Lead   *Palo Alto, CA*
- Automated ball shooting, path finding, and tuned PIDF control loops in Java for the yearly FIRST Robotics Competition
- Managed a variety of team projects and deadlines, including integration between software and hardware subteams, technical documentation, team culture, and outreach projects

PROJECTS | alanzhang2002.github.io

GLADOS Automating Science Pipeline | github.com/AutomatingSciencePipeline   **August 2023 – May 2024**
- Developed distributed simulation pipeline for aggregated, automated research simulation
  - Built local multi-server Kubernetes cluster with secrets, networking setup with supporting documentation
  - Full stack service using Next.JS, Python, MongoDB, and Kubernetes on baremetal servers

AI Calendar Assistant   **Oct 2023 – November 2023**
- Prompt-engineered, fine-tuned GPT-powered digital calendar assistant
  - Generates iCal files from plaintext requests, existing calendar details, and preferences, through frontend interface
  - 90% satisfaction rate over small testing set, after using chain-of-thought, formatted prompt

SKILLS & INTERESTS

- **Software skills:** Python, Java, C, Bash, Node.JS, React, HTML, CSS, C#, SQL, Kubernetes, Docker, Assembly, C#
- **Familiar software:** Linux, Docker, VS Code, Postman, MongoDB, Git, Gradle, Tensorflow, Keras, IntelliJ, Jenkins
- **Technical skills:** Familiar with artificial intelligence concepts, virtualization, distributed system basics, debugging, computational efficiency, software design principles/patterns, software security risks
- **Interests:** Philosophy, Sports, Cooking, Reading, Keyboards