Eileen YU

eileenylj@gmail.com · (+1)617-870-9578 · Eileen-Yu · Eileen

Education

Boston University, Boston 2021 – Present

Master student in Computer Science, expected May 2023 *GPA: 4.0 / 4.0*

Shanghai Jiao Tong University, Shanghai 2017 – 2021

B.S. in Communication *GPA: 3.9 / 4.0*

Skills

- Programming Languages: Go, C++, Linux Shell, TypeScript, Python
- Cloud Native Stacks: Kubernetes, Helm, Google Cloud
- Cloud Security: Prometheus, Grafana, Falco, Kyverno
- CI/CD: GitLab-CI, Github-Action, Jenkins
- Web Dev: Nginx, Express.js, ReactJS, Three.js

Open Source Contribution

Package Hunter - GitLab(GSoC 2022) March 2022 – Present

Contributed to GitLab security program on Package Hunter: A Malicious Dependencies Monitoring Tool.

- Migrated the whole system from Docker to Kubernetes, improved scalability by DaemonSet.
- Extended and decoupled the whole systems into individual components of Kubernetes resources.
- Designed and implemented new APIs for in-cluster communication, improved process efficiency.
- Extended the main server as a Kubernetes operator to flexibly schedule resources.
- Sped up data transfer through streaming and reduced duplications by K8s PV/PVC.

Project Experience

MIPS Simulator Feb 2022 – May 2022

Wrote a program to simulate MIPS processor including instruction translations, cache memory and pipeline.

- Impelemented a MIPS instruction interpreter to decode R-Type and I-Type codes.
- Simulated main memory and implemented a fully associative cache.
- Executed instructions with the integration of the pipeline and the interpreter & cache.

MBTA Chatbot Sept 2021 – Nov 2021

Implemented a ChatOps system to fetch live MBTA shedule on various queries.

- Wrote a backend server in C++ to provide data by plentiful queries.
- Implemented a chatbot to support prompt/on-schedule notification based on multiple user requests.
- Containerized the application in Kubernetes for scalability and robustness.

Working Experience

Data Analyst Intern - AWS Aug 2020 – Oct 2020

Analyzed backstage data with Python to discover various usage patterns of customers.

- Loaded data samples to find the relationship between variables; Analyzed the dataset on RDS using SQL statements to obtain the correlation.
- Categorized 20,000 feedback data of a specific product; Extracted feature matrix for texture data; Applied various statistical models and compared training results.