Education

University of Washington

Seattle, WA

B.S. in Computer Science, GPA: 3.91/4.00

September 2019 - December 2022

Related Coursework: Distributed Systems, Computer Networks, Artificial Intelligence, Database Internals, Advanced Algorithms, Systems Programming, Computer Networks, Hardware/Software Interface, Machine Learning, Data Structures and Parallelism, Software Design and Implementation, Web Programming, System and Software Tools.

Work Experience

Palo Alto Networks

Santa Clara, CA

Big Data Software Engineer Intern

June 2022 - Now

Data processing: Working on Big Data platform, data stream processing using PySpark, Scala.

Costco Issaquah, WA

Software Engineer Intern - Enterprise Service Development Team

Jan 2022 - April 2022

- RESTful Microservices Development: Designed and developed RESTful Microservices using SpringBoot framework, integrated with Junit/SOAtest for service functionality. Implemented Docker container to create service image on Quay, and dynamically provision slaves to Jenkins CI/CD pipelines.
- Service Deployment: Created projects/configMap/secrets on Openshift for deployment on Dev/Test/Prod environments. Troubleshot pods through ssh and logs. Worked on developing ADO pipeline for automatic deployment and configuration of RHEL servers for test and prod environments.

Tesla Shanghai, China

Software Engineer Intern - Big Data Team

July 2021 - Sept 2021

- Data Visualization: Developed real-time production line dashboards using Dash & Echarts framework in Python
 that triggers synchronous data fetching from databases(Presto + Vertica) for high-customized front-end display.
 Reduced the onsite feedback cycle from ten minutes to almost real-time.
- Data Warehousing: Built and deployed high-availability ClickHouse cluster using Zookeeper on Linux servers.
 Conducted Kafka injection into ClickHouse for stream-data processing and multi-platform data migration.
 Implemented the distributed database management system demo as the proof of concept using Docker (github/yingfc/clickhouse_cluster).
- Dev Environment: Combined python dependencies of dashboard projects into an all-in-one customized artifact to standardize dashboard development for higher efficiency, and organized ClickHouse cluster environment properties on Docker and Kubernetes.

Momenta.ai Suzhou, China

Software Engineer Intern - High-Definition Map Data Service Team

July 2020 - Oct 2020

- Map Data compilation: Developed a High-Definition map data pipeline with functional programming by Scala, processing map data from raw reads to organized data via topology reorganization and semantic computation.
- Compiler optimization: Implemented topological filtering method to cluster map data via features, enabled visual debugging and reduced the dependency on upstream data accuracy, shortened compilation time of 200km of high-way raw data from 40 minutes to 20 minutes.
- DevOps Workflow Optimization: Created and maintained the Azure DevOps CI/CD pipeline for feature development, and set up the Staging-Prod pipeline triggers to enable auto-tagging for release and auto-deployment on Kubernetes to improve project deployment efficiency by 40%.

Projects

Campus Path Finding Tool

Jan 2021 - March 2021

 Web-based application on UW campus path planning/finding tool used React and SparkJava framework to design GUI and implemented the MVC design pattern.

Skills

- **Programming Languages:** *Proficient* in Java, Scala, Python, SQL, JavaScript, HTML/CSS; Familiar with C/C++; Previously used R, Matlab.
- Software & Tools: JetBrains (IntelliJ, PyCharm, DataGrip), Atlassian(Bitbucket, Jira, Confluence), Git, Azure DevOps, Docker, Kubernetes, AWS, GCP, Gradle, Maven, ClickHouse, Zookeeper.