

Yingfan (Eric) Chen

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Education

University of Washington

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

Seattle, WA

September 2019 – June 2023

Related Coursework: Distributed Systems, Computer Networks, Artificial Intelligence, Database Internals, Advanced Algorithms, Systems Programming, Machine Learning, Data Structures and Parallelism, Software Design.

Work Experience

Palo Alto Networks

Big Data Software Engineer Intern - Big Data Team

Santa Clara, CA

June 2022 - Sept 2022

- **Data Management:** Built distributed in-memory applications using Spark (PySpark and Spark Scala API) and used YARN as resource manager to increase analytics efficiency on huge data sets by 40%. Conducted data profiling and data visualization to help make business decisions.
- **Data monitoring:** Built a framework to retrieve data from two data sources (Google Sheet & Big Query Dataset) and alert the business regarding the difference after comparison, improved the data pipeline feedback by 60%.
- **Data Streaming:** Utilized Kafka and Spark-Streaming to gain real-time streaming data in HDFS from multiple data sources for analysis, improving the pipeline efficiency by 30%.

Costco

Software Engineer Intern - Enterprise Service Development Team

Issaquah, WA

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. Troubleshoot pods through ssh and logs. Worked on developing ADO pipeline for automatic deployment and configuration of RHEL servers for test and prod environments.

Tesla

Software Engineer Intern - Big Data Team

Shanghai, China

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.
- **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

Software Engineer Intern - High-Definition Map Data Service Team

Suzhou, China

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%.

Skills

- **Programming Languages:** Java(4 yr+), Python(2 yr+), SQL(2 yr+), Scala(1 yr+), C/C++(1 yr+), JavaScript(1 yr+);
- **Framework & Tools:** Spring, MVC, Node.js, Spark, Git, Azure DevOps, GCP, AWS, Docker, Jenkins, Kubernetes/Openshift, Gradle, Maven, Ant, JetBrains (IntelliJ, PyCharm, DataGrip), Atlassian(Bitbucket, Jira, Confluence)