Dale Chang

Sr Full-Stack Software Engineer

dalecb13@gmail.com
+1 (720) 491-9441
Remote on Pacific Time

Infrastructure

- AWS Certified Developer
- Linux, Mac OSX
- Docker & Kubernetes
- GitLab & Jenkins CI/CD

Front-end

- React, Angular, Redux, RxJS, Material, Bootstrap, Jasmine, VS Code
- Sketch, Adobe XD

Middleware

- NodeJS - NPM, Express, NestJS
- Java - Spring REST
- Python - Flask, Falcon

Data Layer

- SQL - MySQL, PostgreSQL
- NoSQL - HBase, HDFS, MongoDB
- Document - Elasticsearch 6

Analytics

- Deep Learning
- Supervised & Unsupervised Machine Learning
- AWS SageMaker + Jupyter Notebook
- SparkML 2.1+

Streaming/Messaging

- Kafka
- Apache NiFi

SDLC

- Agile + Scrum
- Git, GitLab
- Atlassian, JIRA, Confluence

About

I am a cloud application engineer with 8+ years of experience across the enterprise computing stack, including front-end, middleware, back-end, DevOps, and analytics experience. In my next role, I aim to solidify my microservice development experience and then transition into leading architecture decisions.

Work Experience

SAIC - **Sr Software Engineer**

Feb 2023 - present @ Remote

DARPA develops cutting-edge solutions to predict and meet the needs of the United States government. As a software engineer, I worked with other engineers and members of our armed forces to create an innovative solution to protect US interests.

- Improved custom ReactJS-based analytics dashboards focusing on real-time geospatial data in MapBox.
- Developed a solution for displaying live schema updates to dynamic datasets in OpenAPI.
- Created an automated testing suite in Streamlit aggregating a variety of health checks for services distributed on K8s.

Innovim - **Technical Product Manager, Tech Lead, Engineer**

Apr 2022 - Jan 2023 @ Remote

Kessel Run develops a suite of modern applications to revolutionize how the Air Force manages theaters of war. I lead a team of engineers who provide the capability to monitor and optimize how applications operate in Pivotal Cloud Foundry and Kubernetes.

- Engineered and optimized user analytics ETL pipelines, UIs, and microservices in PCF and K8s environments.
- Designed, refined, and delivered proof of concept architectures and features to meet changing platform requirements.
- Developed applications to meet strict DoD security requirements compliant with GitLab CI/CD Pipelines.
- Lead Agile meetings, coordinated engineer interests, and aligned labor to meet leadership vision via GitLab and Scrumban methodologies.

Cigna - **Software Engineering Senior Advisor**

Feb 2019 - Mar 2022

Financial Analytics On-Demand (FAOD) is a financial application which shows diagnostics, summaries, and trends on how client customers' employees are using healthcare. FAOD is an upgraded design leveraging containerization and container orchestration of Angular 6 deployed on Nginx with a Python REST API.

- Lead design and development of front-end features from end-to-end, from REST API (Python + Flask) to front-end (Angular 6+)

- Wireframed and developed reusable components in Sketch and Adobe XD through meetings with stakeholders
- Lead knowledge transfer sessions for basic and intermediate Angular development to junior members of the team
- Developed Jenkins CI/CD pipelines for continuous integration and automated deployments

Leidos (CAADS) - **Data Integration Engineer**

April 2018 - Jan 2019 @ Gaithersburg, MD

Collaborative Advanced Analytics & Data Sharing (CAADS) is a data lake and data science platform that helps federal health-focused agencies identify trends in their data.

- Developed an automated help desk chatbot that reduced agent workload by 40%
- Lead the development of NLP ingestion and analytics pipelines via Apache Spark 2+, Apache Tika, and Solr on Cloudera Hadoop
- Developed, refined, and automated training & evaluation of machine learning inference models in Jupyter Notebook and AWS Sagemaker
- Developed and tuned LSTM and bidirectional autoencoder neural network models for supervised machine learning inference on electronic documents

Leidos (Department of Justice) - **Text Analytics and Software Analyst**

Feb 2016 - March 2018 @ Washington DC

Collaborative Open Base for Review and Analytics (COBRA) is a big data, on premise open source platform for legal review and e-discovery. Federal agencies with non-existent litigation budgets use the platform to upload, organize, and identify documents with pertinent evidence for court matters.

- Designed and developed a continuous active learning system that amplified the power of SME analysis by 50x using Apache Spark, Kafka, REST APIs, and Solr
- Engineered ETL pipelines in Apache NiFi, Spark, and Solr to ingest ~1,000,000 electronic documents per hour
- Refined OCR (optical character recognition) and vectorization processes for extracting test from electronic documents and images and improved document classification accuracy by 30%
- Created an arbitrated document classification system to leverage the strengths of machine learning models and decreased their weaknesses
- Researched state-of-the-art deep learning architectures and algorithms

Certifications & Clearances

- AWS Certified Developer - Associate, valid from June 2021 to June 2024
- Active Secret Clearance with the DoD

Education History

University of Virginia - **Bachelor's in Physics**

Graduated Spring 2013 @ Charlottesville, VA

- As a TA, lead weekly mentoring sessions on software and robotics design
- As a materials researcher, analyzed efficiency and identified flaws in commercial solar panels with scanning probe microscopy and electron microscopy
- As an applied physics data analyst, evaluated sub-atomic particle collision data from the LHC accelerator in CERN using Linux and C++ to corroborate the discovery of the Higgs boson