Ian Laird

ianclaird.com
(406) 599 - 8946
ian@ianclaird.com
github.com/i-laird

Software engineer with 5+ years of experience building backend systems, data pipelines, and ML infrastructure at Google and Capital One. Skilled in Java, cloud computing, distributed systems, and ML.

Google

Software Engineer III — October 2023 - Present
Software Engineer II — September 2022 - October 2023

- Mentored 5 junior engineers and interns.
- Became the AI champion of my team and taught coworkers how to increase their productivity and optimize workflows using it. This was done through presentations and enhanced internal documentation.
- Designed, implemented, collected data for, tested, and launched a multilingual state-of-the-art machine learning model using TensorFlow and BERT. This model featured a 2x performance improvement and 10-50% quality improvement.
- Designed and implemented MapReduce pipelines for the generation of ML benchmarking data.
- On-call rotations demonstrated my ability to handle high-pressure situations, provide top-notch support to clients, and document incidents to ensure knowledge transfer.

Toast

Software Development Engineer II — June 2022 - September 2022

- Implemented an API for generating user metric reports.
- Transformed the existing database management code into a standalone microservice. This streamlined automated testing processes and bolstered the stability and efficiency of the CI/CD pipeline.

Capital One

Senior Associate Software Engineer — July 2021 - June 2022
Associate Software Engineer — August 2020 - July 2021

- Significantly reduced Capital One's annual operating costs by hundreds of thousands and saved hundreds of developer hours annually through the retirement of a cloud-based legacy application.
- Constructed a Java microservice that transferred tens of thousands of files between systems of record to comply with internal audit requirements.
- Constructed a comprehensive data pipeline for the collection and combination of large datasets from secure s3 buckets and snowflake tables. The pipeline employs Spark on an EMR cluster, controlled by a containerized Java microservice, to perform complex computations.
- Increased Cloud Resiliency by creating infrastructure needed for applications to quickly fail over to a backup AWS region.
- Revamped IAM roles and policies to comply with stricter internal requirements.
- Developed a web application for tracking financial fraud.
- Improved automated testing of the application by expanding E2E, unit, and integration tests.
- Participated in multiple AWS regional failure simulations.

Education

Baylor University — May 2020

- Bachelor of Science in Computer Science
- Magna Cum Laude

AI Tools

ChatGPT • Gemini • Gemini CLI

Languages

Java • C / C++ • SQL • Python • Bash

Frameworks & Libraries

Spring • TensorFlow • BERT • NLTK • Scikit-learn • JPA • JDBC

Testing & DevOps

JUnit • Cucumber • Jenkins • Git • GitHub • Postman • Maven • Mercurial

Cloud & Infra

AWS (S3, EC2, RDS, ECS, EMR, IAM) • Docker • MapReduce • GCP (Spanner, BQ, SDP)

Other Tools

Slack • IntelliJ IDEA • Unix • Proto Buffers

Projects

Derivative – Spring Boot, Docker, Github Actions

- REST API which uses intelligent lexical analysis, the shunting yard algorithm and ASTs to solve derivatives.

Football – Spring Boot, React, MySQL, Kubernetes

- Full stack application which fetches, analyzes, and displays college football statistics.

HTTP Server / Client – Java, Sockets, Multithread

- Implements a simplified http server and client compatible with TLS including an HTTP discovery service.

Review Analyzer – NLTK, Scikit-learn

- Determines the sentiment of product reviews.