Daniel Tripp

daniel.tripp100@gmail.com
linkedin.com/in/danieldtripp
github.com/thedtripp
(951)445-9123

Work Experience

Google San Francisco, CA

Software Engineer Intern *May 2022 - September 2022*

- **Data Pipeline Observability**
  - Built out a web-based analytics platform for extract, transform, load (ETL) pipelines.
  - Pipeline observability empowered 250+ engineers and product managers to examine ETL pipelines and make real-time predictions about key metrics related to throughput, latency, saturation, and errors.
  - Extended data pipeline infrastructure to record timestamps of data transformations in relational database.
  - Developed, tested, and documented REST API to read/write data in Google Spanner relational database.
  - Implemented server-side application logic to aggregate data and compute relevant metrics.
  - Designed and implemented a user interface which made the data accessible in a meaningful and intuitive way.
  - Assumed ownership of software development lifecycle (requirements, architecture, coding, testing, deployment).
- **Tech Stack: Java, C++, SQL, Google Cloud Spanner, Google Cloud Platform, JUnit, Blaze/Bazel, Google Guice Dependency Injection Framework (Java Spring), Protocol Buffers (protobuf), Linux**
- Spearheaded planning and execution of fun intern events including karaoke nights, rock climbing, and hiking trips!

Quantcast San Francisco, CA

Software Engineer Intern *July 2021 - October 2021*

- **Cloud Computing Resource Conservation**
  - Achieved a 6% reduction in operational costs associated with compute spend by improving resource (processing power, memory, file storage) management through cloud cost optimization.
  - Implemented and tested a resource auto-tuning algorithm to monitor recurring scheduled jobs for discrepancies between requested resources and consumed resources. This algorithm allocated fewer resources based on historical averages of resource use in previous instances of the job.
- **Machine Learning Infrastructure**
  - Reduced debugging time for machine learning model training by 30%.
  - Built an interactive, web-based analytics platform which allowed users to query and visualize metadata from the machine learning (ML) training process for thousands of ML models.
  - Eliminated the need for users to write Spark queries to view this metadata, and allowed modeling/data scientists to track down operational issues with the ML models much faster and more efficiently.
- **Tech Stack: Python, pandas, Java, Kubernetes, Docker, Terraform, AWS CloudFormation, Kafka**
- **Data Playground** - an internal, web-based **IDE** (integrated development environment)
  - Extended the Data Playground IDE to include basic GraphQL Support (inserted common boiler-plate code snippets and provided documentation/support to new users).
  - This project was submitted to the annual Quantathon (Quantcast's company-wide Hackathon) and received an honorable-mention out of 30+ participants.
- **Tech Stack: Django, React, JavaScript, HTML, CSS, PostgreSQL, Swagger, pytest, Postman**

Skills

Python, Java, C++, C#, JavaScript, HTML, CSS, Linux/Unix, SQL, AWS, Git, Microsoft Office

Projects

Stock News

App Retrieves Latest News. - Link *Python, REST API, pandas, Dash, Plotly, CSS, Bootstrap*

- Designed, coded, tested, and deployed a web application to display market data on over 500 US securities.

Celebrity Face Matching: Machine Learning Application

Face Recognition App with Deep Learning - Link *Python, TensorFlow, OpenCV, CSS, Dash, numpy*

- Application detects, captures, and analyzes user's face and returns an image of the most similar celebrity's face.

Education

UCLA University of California, Los Angeles Los Angeles, CA

Bachelor's of Science: Biochemistry

California State University, Long Beach Long Beach, CA

Master's of Science: Computer Science *January 2024*

Curriculum: Analysis of Algorithms, Artificial Intelligence, Data Structures, Database Architecture, Design Patterns, Distributed Systems, Information Security, Machine Learning, Object Oriented Analysis & Design, Operating Systems, Programming Languages, Software Development Frameworks, Software Engineering, Software Testing & Verification.