Emad Siddig

San Francisco, California

(510) 990-5437

emadsiddig@berkeley.edu



esiddig.com

in linkedin.com/in/esiddiq

Experience

Flexport Software Engineer | Identity & Access Management San Francisco, CA

Nov 2022 - Nov 2023

- Replaced existing Login & Signup OAuth 2.0 framework implemented in Ruby on Rails with Java microservices, migrating over 200,000 active users and onboarding developer teams across time zones
- Integrated company acquisitions, Deliverr and Shopify Logistics, to call the new in-house APIs for a unified login and signup experience, saving \$250,000 in contract bills from our OAuth vendor Auth0
- Generated automatic JUnit test coverage on pull requests using Jacoco data parsed with pandas and autoposted aggregate changes as comments on PRs with Github Actions when the CI/CD pipeline ran
- Authored comprehensive technical documenation and security review for the new IAM APIs which underwent a thorough vetting from the security compliance team and was approved with positive remarks
- Regularly performed on-call duties using telemetry frameworks like Grafana, Datadog & Sumologic

Fin3 Technologies

New York, NY

Software Engineer | Full Stack

January 2022 - November 2022

- Gained expertise from FinTech veterans in smart contracts and blockchain cryptography by deploying dApps to Provenance, a proprietary proof-of-stake chain, powered by the Tendermint core
- Built containerized AWS-based Java apps using Docker & Kubernetes for tokenized deposits on the Stellar network and conducted extensive testing of Rust dApps with CosmWasm and Cosmos SDK
- Designed and deployed a Bitcoin mining monitoring system for bankers interested in bitcoin network statistics like difficulty, hash rate, metrics, network fees and other metrics from Coin Metrics' API
- Integrated data from XML based bank APIs with in-house Java Spring Boot services, enabling instant bank payments on proprietary distributed ledgers and worked with traditional banking API's like Fiserv

UC Berkeley Law School

Berkeley, CA

Research Associate in Data Science

September 2019 - May 2020

- Mined over 50GB of historical XML of patent data (1850-present) from the United States Patent and Trademark Office (USPTO) and created scripts to work with batches of the data in Jupyter Notebook
- Extracted, transformed and loaded the data using a 5GB remote linux instance offered by the Statistics department in Berkeley's computing cluster, parallelizing algorithms by using multithreading in Python
- Implemented NLP algorithms based on tf-idf and cosine similarity to match company names to trademark data very fast and efficiently, bringing down dataset processing time from weeks to hours
- Visualized and presented data patterns with pandas and matplotllib in weekly meetings to our project lead, Professor Sonya Katyal

Education

University of California, Berkeley

2017 - 2021

B.A. Political Economy, B.A. Data Science

GPA: 3.24

 Relevant Courses: Machine Learning (CS 189), Stochastic Processes (INDENG 173), Probability Theory (STAT 140), Advanced Algorithms (CS170), Econometric Analysis (ECON 141), Linear Algebra (MATH 54)

Skills

Languages: C, Java, R, Python, Julia, C++, C#, Go, Rust, Golang, TypeScript, React, CSS, Javascript, PHP, Ruby Software: Spring Boot, Kubernetes, Minikube, Next.Js, nginx, PyTorch, networkX, Mockito, Maven, TensorFlow, PostgreSQL, GraphQL, Grafana, NLTK, MFA, OAuth 2.0, S3, OIDC, RBAC, Gradle, Bazel, Keras, Pandas, Sentry