# **Emad Siddig**

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## **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 repo test coverage to run on pull requests by parsing Jacoco csv data with pandas and autoposting aggregate change in coverage as a comment using Github Actions in the CI/CD pipeline run
- 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 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. Data Science, B.A. Political Economy

**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