

Kourosh Arfania

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EDUCATION

University of Southern California, Viterbi School of Engineering and Marshall School of Business
Computer Science/Business Administration

Los Angeles, CA
05/2025

Honors & Programs: Full-Tuition Trustee Scholar, Viterbi Undergraduate Fellow, Grand Challenges Scholar

GPA: 3.93

Relevant Coursework: Accelerated Programming in Python, Discrete Methods in Computer Science, Data Structures, Algorithms, Software Development, Computer Systems, Operating Systems, Software Engineering, Swift Programming

EXPERIENCE

The Cigna Group

Bloomfield, CT

Full Stack Engineering Intern

May 2023-Present

- Authoring data workflows in **Apache Airflow**, developing DAGs in a **docker-compose** environment to automate script execution through a variety of polling, scheduled, and instance-driven responses
- Building compliant **AWS** Architectures in **S3**, **Lambda**, **API Gateway**, **Aurora**, and **Neptune** for data storage and database interfacing that scales for petabytes worth of high-security, encrypted medical data
- Leading a 7-member team in developing a **serverless API** with **Node.js** and **Lambda** to process medical questionnaires using **FHIR** protocol and **Gremlin** graph database traversal

Syntiant Corporation

Irvine, CA

Engineering Intern

July 2022-September 2022

- Created, packaged, and deployed a **Python CLI** application with **Boto3**, **Click**, **Keras**, **PyMongo**, **BeautifulSoup**, and **yt-dlp** to scrape multimedia content, train voice recognition models, and populate a **MongoDB** instance with metadata and **S3** pointers
- Consulted with senior leadership to develop comprehensive **Jenkins** pipeline scripts for robust CI/CD across the enterprise

Papaya Payments

Los Angeles, CA

Web Automation Engineering Intern

October 2021-March 2022

- Automated bill payments for 30 partners, increasing robustness and reducing physical labor hours by 12%
- Bots written in **JavaScript** and **Selenium**, leveraging online Testim services for primary development

LEADERSHIP AND INVOLVEMENT

Shift SC

Los Angeles, CA

Executive Board, Vice President of Communications & External Affairs

September 2021-May 2023

- Managed a team of 10 to effectively promote the organization through social media efforts, a weekly newsletter, and LinkedIn
- Consulted with the **Viterbi School of Engineering** to introduce their 'Engineering in Society' program to the student body, enabling our team to present relevant AI, sustainability, and ethics modules to faculty and classrooms alike
- Wireframed, organized, and developed organization's launch website with **Figma**, **Ruby**, **HTML**, **SCSS**, and **JavaScript**

PROJECTS

roomiez

Spring 2023

- Full-stack web application that assists users in managing household responsibilities through a visualized aggregate task board with user-authenticated login, group management, and email notification services
- Leverages a multi-threaded **Spring** back-end with controller, service, and repository layers and **Maven** dependencies deployed through **AWS Elastic Beanstalk**, **EC2**, **VPC**, and **Cloud RDS** based in MySQL
- Dynamic front-end implementing **AJAX** methodology, **React**, and **react-router-dom** to efficiently handle data interaction

philakit

Winter 2023

- An integrated web application, chrome extension, and data processing platform that improves consumer conscientiousness by informing users of the climate impact their purchases lead towards and suggesting local, sustainable non-profit involvements
- Built a **Flask** microservice that aggregated ESG reports of corporations, authenticated user log-in, stored user story information in Firebase, and implemented **RESTful API** services for front-end communication
- Wrote a **React** front-end leveraging **react-router-dom**, **Axios**, and **react-iframe**s to dynamically visualize complex data sources

SKILLS AND INTERESTS

- Languages: English (Fluent), Farsi (Conversational), Mandarin (Basic)
- Technical Skills: C++, Python (Flask), Java (Spring), JavaScript, SQL, MongoDB, Linux OS, AWS, Docker, React, Jenkins
- Interests: Environmentalism, Outreach, Running | Back-End Software Development, Web Applications