# Kourosh Arfania

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## EDUCATION

**University of Southern California, Viterbi School of Engineering and Marshall School of Business**  Los Angeles, CA
Computer Science/Business Administration  05/2025
**Honors:** Trustee Scholar, Viterbi Undergraduate Fellow  GPA: 3.93
**Programs:** Grand Challenges Scholar Program, W.V.T. Rusch Undergraduate Engineering Honors Program
**Relevant Coursework:** Accelerated Programming in Python, Discrete Methods in Computer Science, Data Structures, Intro to Algorithms, Principles of Software Development, Intro to Computer Systems

## EXPERIENCE

**The Cigna Group**  Bloomfield, CT
Full Stack Engineering Intern  May 2023-Present
- Upgrading an internal data processing application from version 3.x.x to 5.x.x, encompassing nearly 500 changes
- Building compliant AWS Architectures in S3, Lambda, Glue, Aurora for data storage and database interfacing
- Discovering ways to visualize client-facing and internal metadata for the Data Engineering Team, using Tableau and React

**USC Center for Artificial Intelligence in Society (CAIS)**  Los Angeles, CA
Undergraduate Research Assistant  September 2022-Present
- Running training and validation data on the megaSDM R package to simulate and predict 12 ESA-listed species migration patterns as impacted by climate change
- Demonstrated findings at an undergraduate research symposium, highlighting the high risk-level of Appalachian species
- Implementing additional parameter arguments, automated and organized file output formatting, and CARC deployment

**Syntiant Corporation**  Irvine, CA
Engineering Intern  July 2022-September 2022
- Created a Python-based CLI application with Marshmallow, Boto3, Pandas, Keras, PyMongo, and yt-dlp to scrape video/audio content for voice recognition model training and populate a comprehensive NoSQL database with metadata and S3 pointers
- Leveraged MongoDB and Amazon S3 technologies for cloud-based storage and data lake creation
- Version control via Git in the Gitlab environment, with CI/CD protocols and dependencies managed by Jenkins

## LEADERSHIP AND INVOLVEMENT

**Shift SC**  Los Angeles, CA
Executive Board, Vice President of Communications & External Affairs  September 2021-May 2023
- Managing a team of 10 to effectively promote the organization through social media efforts, a weekly newsletter, and LinkedIn
- Primary point of contact between Shift SC and third parties such as the Viterbi School of Engineering and LookUp
- Created the club's website using Jekyll and GitHub Pages, with most work done in pure HTML and CSS
- Consulting with the Viterbi School of Engineering to introduce their 'Engineering in Society' program to the student body

## PROJECTS

**roomiez**  Spring 2023
- Full-stack web application that assists users in managing household responsibilities through a visualized aggregate task board
- Leverages a sophisticated Spring back-end with controller, service, and repository layers and Maven dependencies
- Dynamic front-end implementing AJAX methodology, Bootstrap, React, and react-router-dom
- Deployed through AWS Elastic Beanstalk, using a cloud RDS based in MySQL Community

**philakit**  Winter 2023
- An integrated user-authenticated web application, chrome extension, and data processing platform that aims to improve consumer conscientiousness
- Back-end functionality written in Python, handling API routing via Flask and communicating with Firebase
- Front-end web application written in React, leveraging react-router-dom, Axios, and react-iframes to dynamically visualize data

## SKILLS AND INTERESTS

- Languages: English (Fluent), Mandarin (Conversational), Farsi (Basic)
- C++, Python (Flask), Java (Springboot), JavaScript, SQL, MongoDB, Linux OS, AWS, Docker, React, Angular
- Interests: Environmentalism, Social Justice, Back-End Software Development, Web Applications