# **Swapnil Shaurya**

281-837-9121 | swapnil.shaurya@utexas.edu | linkedin.com/in/swapnil-shaurya

## **EDUCATION**

## The University of Texas at Austin

B.S. Computer Science & B.A. Economics

Courses: Data Structures, Algorithms, Software Engineering, Machine Learning, Databases, Cloud Computing,
Operating Systems, Computer Architecture, Linear Algebra, Multivariate Calculus, Probability and Statistics

#### **WORK EXPERIENCE**

**Google** May 2023 – Aug 2023

Software Engineering Intern

- Full-stack & iOS Development in Java, C++, and Swift/Objective-C on the YouTube Connected Experiences team
- Designed & implemented new feature, supporting simultaneous video playback on phone while casting to TV
- Implemented multiple iOS UIs and wrote code/unit tests spanning all team stacks: iOS, Server, TV (TypeScript)
- Took ownership of soft launch (coordinated PM & UX); developed metrics to track usage (~12M users per day)

**Google** Aug 2022 – Dec 2022

Software Engineering Intern

- ML Modeling/Infra & Backend Development in Python and C++ on the Document AI team within Google Cloud
- Implemented a novel E2E modeling pipeline for the training, prediction, and evaluation of open-source PyTorch models on GCP Vertex AI infrastructure
- Developed Python data processing libraries with unit tests and modeling pipeline integration
- Launched a new prediction endpoint for Doc Al's **REST API** using a custom-built **Docker** image

Charles Schwab May 2022 – Aug 2022

Software Engineering Intern

- Backend/Database development on the Client Data Management team overseeing migration to a new database
- Built Java distributed microservices in a high-volume environment (>50k requests per min) using Spring Boot
- Developed a Restful API to optimize retrieval from DB2 (legacy) and Yugabyte databases for 40 million accounts
- Wrote SQL queries to migrate data, designed JUnit tests, and created Splunk prod monitoring dashboards

## **MD Anderson Cancer Center**

Aug 2021 - Dec 2021

Graduation: May 2024

GPA: 3.78/4.00

Data Science & ML Research Intern

- Processed demographic & health data with MySQL, creating data clustering models in Python with SciKit-Learn
- Applied the Elbow Method with K-means clustering, and principal component analysis to isolate key features

## The University of Texas at Austin

Aug 2020 - Jun 2021

Machine Learning Research Assistant

- Authored a research paper that proved 93% efficacy of structured white noise reduction using GANs
- Created a style-based GAN (StyleGAN) that implements the pixel2Style2pixel framework in Python with PyTorch

#### PERSONAL PROJECTS

#### **Electrends**

- Created a Web app that aggregates data on Texas elections, politicians, and electoral districts
- Frontend: JavaScript (React, Bootstrap), Backend: RESTful API using Postman & Flask, Deployed: Docker, AWS

#### **Budgeter App**

- Designed a Java application that helps track expenses and build monthly budgets based on previous spending
- Utilizes Node.js for the Backend with express framework and stores user data with MongoDB database

#### SKILLS

Programming: Java, Python, C/C++, JavaScript, React, Swift, Objective-C, SQL, NoSQL, R

Machine Learning Libraries: Python: SciKit-Learn, PyTorch, TensorFlow

Cloud Platforms: Google Cloud (GCP): Associate Cloud Engineer Certification & internship, AWS: class/project experience

## **LEADERSHIP**

**Assoc. for Computing Machinery**, *VP Finance & Active Member:* Handle club finances and help plan events/activities **Texas Code Orange**, *Volunteer Tutor:* Teaching scratch programming to underprivileged kids in downtown Austin