Jason D'Souza

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EDUCATION

University of Texas | Austin, Texas

GPA: 3.74

Bachelor of Science, Electrical and Computer Engineering

May 2023

Relevant Coursework: Discrete Math, Software Design and Implementation I and II, Algorithms, Digital Logic Design, Software Design, Data Science Principles, Data Science Lab

Minor, Business

SKILLS

Programming Languages: Python, Java, JavaScript, TypeScript, C, C++, COBOL

Web and API Development: React, HTML, CSS, RESTful APIs, GraphQL, JSON, Flask, Spring Framework, OpenAI API

Database: MongoDB, PostgreSQL, OrientDB, SQL

DevOps: Jenkins, AWS (Amplify, EC2, DynamoDB), Heroku, Docker, Gitlab, Git, Agile, CI/CD, Vercel, Railway

Languages: English (native), Spanish (working proficiency)

EMPLOYMENT EXPERIENCE

Deloitte Product Engineer

August 2023-April 2025

- Developed and deployed a new product designed for large scale refactoring of migrated Java files using Domain Specific Language scripts, AST modifications and the Spoon library to lint and bring code closer toward native Java solutions. Developed custom features and scripts of this product for JPMorgan Chase and The Vanguard Group and deployed to JPMorgan Chase
- Helped create endpoints, service classes and update business logic for the backend of a Spring Boot application designed to mine z/OS program files from IBM Mainframe
- Implemented a Neural Network using TensorFlow to help identify what coding languages are being used in mystery files. Deployed to help identify legacy code such as JCL, PL/I, and various types of assemblers

Deloitte Product Engineering Summer Scholar Intern

June 2022-Aug-2022

- Created a local web application using React.js and Spring Boot to view IBM datasets.
- Improved upon existing system by building a system that is OS and IDE agnostic
- Created Unit tests, participated in a coding review process, and utilized the software development life cycle

ENGINEERING PROJECTS/RESEARCH PROJECTS

YogaFlow: Custom Yoga Routine Web App

August 2025-Present

- Designed a web app that allows users to generate custom yoga routines via OpenAI LLM API integration
- Developed with React frontend, Python Flask REST API, and Supabase DB. Deployed using Vercel and Railway

Repetio: Spaced Repetition Web App

September 2022-May 2023

- Designed a web app that uses ML to help review flashcards at the optimal time using a tech stack of a CatBoost Model, DynamoDB, AWS Amplify, and React frontend
- Earned 1st place for student-led projects at the 2023 University of Texas Senior Design Showcase.

Fuel Cell Catalysis Project, Xia lab, University of North Texas

May 2017- April 2019

- Performed computer-aided design of doped graphene and electrocatalysts for Oxygen and Hydrogen Reduction and Evolution. Optimized catalyst performance using molecular dynamics computer simulations
- Publication: Zhenghang Zhao, Jason R. D'Souza, Fuyi Chen, and Zhenhai Xia "Rational Design of Efficient Transition Metal Core-Shell Electrocatalysts for Oxygen Reduction and Evolution Reactions" RSC Adv., 2019,9, 536-542 DOI:10.1039/C8RA09122F

AWARDS/SCHOLARSHIPS

Engineering Honors Scholarship