# Aditya Jadhav

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## Education

**University of Arizona** Tucson, Arizona
***Bachelor of Science in Computer Science*** ***Jan 2021 - May 2024***
**GPA: 3.96/4.0**
**Global Wildcat Scholarship Winner**

## Technical Skills

**Proficient Languages**: Python, Java, C, SQL, NoSQL, JavaScript, PHP
**Libraries**: Pandas, Matplotlib, NumPy, Scikit-learn, PyTorch
**Frameworks**: Relational DBMS, React.js , RESTful APIs, Node.js, Flask, JUnit
**Developer Tools**: Docker, CMake, Git, Unix, Agile

## Experience

**Undergraduate Research Programmer** May 2021 – Jan 2023
*University of Arizona - ToMCAT Project* | ***Python, Linux, Git, JS, Flask, FFMPEG***

- Developed a visualisation dashboard to display captured sensor data of participants using wxWidgets, MQTT databus and C++. Has achieved monitoring of data and various parameters in 50+ tests, works with 9+ devices updating data every 0.1 second.
- Built a full-stack Flask application using Python, GoogleSpeech API, HTML, CSS and JavaScript to record entrainment data such as speech, video , LSL synchronised data which is later analysed by a social scientist team.

**Undergraduate Research Assistant** Feb 2023 - Present
*University of Arizona* | ***Python, PyTorch***

- Currently researching under Dr. Chicheng Zhang on a paper focused on active learning with noisy label using early stopping gradient descent under Tsybakov Noise. Work with PyTorch and Python to convert a theoretical model developed by professor and graduate students to code for learning under Tsybakov Noise.

**Senior Teaching Assistant - CSc 335 (Object Oriented Programming)** Jan 2022 – Present
*University of Arizona* | ***Java, JavaFX, Maven, Discrete Math***

- Attend class lectures to offer office hours to help students, schedule feedback meetings with students, assist with grading. Work with 12 TAs to achieve stated learning goals in class for the students.

## Projects

**Hotel Database** | ***SQL, Java, Unix***

- Built a full fledged Database in SQL and JBDC for a working hotel including Employee management, Bill creation, Rewards and Membership management, Addition/Updation/Deletion of Guests, Employees, Bookings. Built a CLI for management of DB by employee.

**Chess Website** | ***React, NodeJS, Express, SQL, Web Assembly***

- Created a website where players can play and analyze chess games using Express for backend, NodeJS for StockFish 14 chess engine package and React for frontend. Uses SocketIO for multiplayer and mySQL for user database, and storing information of the user. Built out of requiring a platform for the university chess club of 50+ members.

**NBME NLP Classifier** | ***Python, Scikit-learn, NumPy, Matplotlib***

- Developed an automated method using various ML models to identify key clinical concepts in patient notes, optimizing for a Kaggle competition. It cross checks various ML models and tries to identify the best learning model for identifying best features from text. Achieved 80% accuracy in the model.

## Relevant Coursework

- Unix and System Programming
- Deep Learning
- Text Retrieval and Web Search
- Database Design
- Computer Networking
- Web Development
- Data Structures and Algorithms
- Computer Organisation
- Functional Programming
- Software Development
- Object Oriented Design