

# JAISAL MEHTA

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## EDUCATION

### Indiana University – Bloomington

May 2025

*Bachelor of Science in Computer Science - Specialization: Software Engineering*

*Minors: Business, Data Science, Systems Engineering*

**Courses:** Object Oriented Programming, Discrete Structures, Data Structures and Algorithms, Systems Programming in Unix, iOS Application Development, Computer Structures, Advanced Algorithms, Introduction to Computer Networks, Introduction to Data Analysis and Mining, Data Representation, Introduction to Statistical Inference, The Computer in Business

## PROFESSIONAL EXPERIENCE

### Serve IT, Bloomington, IN

August 2023 – December 2023

*UX Design Intern*

- Collaborated with a **multidisciplinary team** to redesign Tandem Birthing Center's website, contributing to the **UX design** process through **wireframes**, **prototypes**, and **mockups**
- Conducted **user research** activities, including **usability testing**, to gather insights informing **design decisions** and enhance **user experiences** tailored to the Bloomington community, while also supporting the development and maintenance of **design systems** and **style guides** to ensure visual consistency and reinforce **brand identity** across projects

### Viant Medical, Wheeling, IL

June 2021 – July 2021

*Manufacturing Engineering Intern*

- Created **validation reports** for medical manufacturing machines, ensuring oil changes met customer demands and production requirements while maintaining a clean **Oracle database**
- Analyzed medical components and generated **statistical reports** in **Minitab** to ensure compliance with client specifications

## TECHNICAL PROJECTS

### Task Manager

April 2025

- **Build a full-stack Task Manager** web app using Spring Boot, React, and MongoDB, enabling users to securely create, complete, and delete personal tasks with real-time UI updates
- **Designed and implemented RESTful APIs and user authentication**, ensuring task data is securely stored, retrieved, and displayed uniquely per user session across frontend and backend layers

### Brain Tumor Classification

March 2025

- **Built and evaluated classification models (K-NN and Decision Tree)** on 3,328 brain MRI images, achieving **up to 85% accuracy** in detecting tumor types including glioma, meningioma, and pituitary
- **Preprocessed and labeled over 3,000+ medical images** using **CV2** and **PIL**, reducing image dimensionality

### Simple Data Pipeline

October 2024

- Designed and implemented a **Python-based ETL pipeline** to **extract, transform, and load (ETL)** real-time weather data from the **WeatherAPI** in a **MySQL database**, utilizing modular functions for **JSON** parsing and **SQL** execution to ensure efficient **data management**
- Developed a dynamic **API integration** that retrieves data based on user-inputted city or ZIP code, enhancing **flexibility** and **user experience**

### Animal ScrapBook

April 2023

- Developed an animal classification app using **Xcode** and **Swift**, integrating a **CreateML model** to classify animals from photos, while also maintaining a record of captured animals, and seamlessly incorporating **UIImagePicker** for photo capture
- Implemented notifications to encourage daily application engagement for an **unlimited number** of users, fostering user interest in discovering and learning about various animal species in a digital format within a **user-friendly interface**

## TECHNICAL SKILLS

**Programming Languages/Technologies:** Java, Python, R, SQL, Swift, UIKit, C, C++, HTML, CSS, Jupyter Notebook

**Platforms:** Mac OS, Windows OS, IntelliJ Idea, Xcode, CLion, PyCharm, WebStorm, Visual Studio Code, Unix, Microsoft 365

## STUDENT INVOLVEMENT

### INgineering Club, Bloomington, IN

August 2023 – January 2025

*Executive Board Member – Treasurer*

- Maintained accurate financial records, reported changes at board meetings, and coordinated purchase approvals with the President, showcasing adept financial judgment for accountable resource management aligned with organizational directives