# 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**
- Gauge medical components and generated statistical reports in Minitab to verify compliance with client specifications

#### **TECHNICAL PROJECTS**

## **Patient System Application**

March 2024 - Current

- Developed a Java-based application using Java Swing, supporting secure login for 100+ users, ensuring 99.9% data accuracy, and reducing query time by 50%
- Utilized an SQL database for CRUD operations, managing unlimited patient records with query execution under 1 second
- Enhanced a prior system with a user-friendly interface, boosting user satisfaction by 35% and reducing data entry errors by 20%

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**
- Enabled user input by constructing API URL based on city or zipcode, ensuring flexibility and user-focused data retrieval

## Stock Price Prediction with Machine Learning and TensorFlow

April 2024

- Developed an end-to-end solution and machine learning model using Jupyter Notebook and Python, with data sourced from Yahoo Finance regarding the Microsoft stock and employing various statistical and machine learning libraries
- Utilized TensorFlow for predictive analysis in the domain of stock price forecasting

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 - Present

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