

# Saurin Patel

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## EDUCATION

**M.S. Computer Science**, Illinois Institute of Technology Chicago, IL

May, 2025

**B.E., Information Technology**, Shah And Anchor Kutchhi Engineering College, University of Mumbai, India

May, 2023

CGPA 3.58/4.00

## TECHNICAL SKILLS

- Programming Languages: Python, Java, JavaScript, C, C++.
- Databases: SQL, MongoDB.
- Cloud-Based Technologies: Azure, AWS (EC2, S3, Lambda).
- Skills: Algorithms, HTML/CSS, Node.js, Express.js, React.js, CI/CD, Machine Learning, AI, Git, Microsoft Office, Project Management, Interpersonal, Presentation, Strong communication, Business and Financial acumen.

## EXPERIENCE

**Research Intern, University Of Naples Italy, Naples, Italy**

Sept 2022 - Nov 2022

- Spearheaded the data preprocessing phase, ensuring the quality and relevance of input data for the Classification and Regression Trees.
- Cleaned, standardized, and augmented datasets, leading to a **25%** improvement in model performance and precise land cover classification.
- Implemented a region-based training and verification approach for a Land Use and Land Cover Classification project, resulting in **92.9%** accuracy and reducing misclassification errors by **40%**.

**Machine Learning Intern, Shah And Anchor, Mumbai, India**

Aug 2021 - Feb 2022

- Conducted an in-depth analysis that revealed a significant performance improvement over standard techniques, achieving a remarkable **89.2%** accuracy in identifying and precisely locating brain tumors in MRI images.
- Employed cutting-edge technologies such as Python, TensorFlow, and OpenCV to optimize and enhance the performance of the YOLOv7 model for improved accuracy.
- Created and implemented a comprehensive research roadmap focused on advancing medical imaging technologies for brain cancer diagnostics.

**Web Developer and Quality Assurance Intern, MoPharma Solutions Ltd,**

Aug 2020 - Feb 2021

- Contributed to pre-project analysis and technical assessments for an optimized user interface.
- Executed hands-on testing on a live website, meticulously crafting test cases, and promptly reporting and tracking identified bugs.
- Oversaw project management and leadership team of four, Designed, built components, and authored web pages using AEM. Got familiar with Agile/Scrum methodologies.

## ACADEMIC PROJECTS

**E-Commerce Website** 

- Led the development of essential features like product display, cart system, and purchase handling while incorporating bonus features such as a user-friendly UI using React.js and Firebase integration for enhanced data management.

**Plant Disease Classifier** 

- Developed an image processing model utilizing Convolutional Neural Networks (CNNs) with TensorFlow/Keras, OpenCV, NumPy, Pandas, Matplotlib, and data augmentation to classify processed leaf images into potato early blight and late blight categories and application with React Native.


**University Prediction System** 

- Conducted comprehensive data analysis on a dataset encompassing over a thousand students, employing Python libraries including NumPy, Pandas, Matplotlib, and Scikit-learn. Utilized supervised learning algorithms such as logistic regression, alongside machine learning techniques, to predict University admissions based on various factors.

**Placement Management System App** 

- Crafted a Placement Management System App with Java, JDBC, Swing GUI, and Core Java to enable seamless interaction between students and companies.

## PUBLICATIONS AND EXTRACURRICULAR

- Land Use Land Cover Classification Using Machine Learning IEEE Xplore. | 
- Head, IT Department at Shah And Anchor Kutchhi Engineering College encouraged students to participate in various technical events and hackathons.
- Functioned as the Co-event Head and point of contact of the Organizing Committee for the technical festival 'Icon'.