

Saksham Malhotra

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EDUCATION

University of Cincinnati, Cincinnati, Ohio

Bachelor of Science, Computer Science

UC International Scholarship award, Global Outreach Scholarship, Dean's list

Expected Graduation: May 2029

GPA 3.93

WORK EXPERIENCE

Data science intern @ Healthsigns.ai

June 2025 – Aug 2025

- Extracted and processed structured data from unstructured healthcare PDFs using spaCy, pdfplumber, and pytesseract, and preprocessed, trained, and evaluated Whisper speech-to-text models for Indic languages with Hugging Face datasets, improving information retrieval and transcription accuracy.
- Integrated and deployed advanced LLM solutions combining Whisper (speech recognition), OpenAI & Groq APIs (generative tasks), and Azure-hosted LLaMA (private inference).

ITRA intern @ PricewaterhouseCoopers (PwC) Middle East

May 2025 – June 2025

- Assisted in documenting and evaluating IT controls as part of the ITRA team at PwC, identifying potential risks and control gaps across business processes and contributing to risk assessment reports.
- Explored applications of AI in auditing, gaining hands-on exposure to emerging technologies in risk assurance and understanding how automation and data analytics enhance audit accuracy and efficiency.

RESEARCH AND ENGINEERING PROJECTS

Sepsis Prediction Model

Sept 2025 – Present

- Developing machine learning models (Random Forest, XGBoost) on ICU patient data (~1.5M records) to predict sepsis onset with high accuracy.
- Applying feature engineering and addressing class imbalance, while using SHAP explainability and metrics like ROC-AUC, precision, and recall validating model performance.

Smart Grocery Budget Tracker

Aug 2025 – Present

- Developing a smart budgeting tool that helps users manage grocery expenses by extracting and structuring data from scanned receipts using OCR and natural language processing (NLP) with spaCy.
- Integrating external APIs to fetch product pricing and category details; building features like spending summaries, budget alerts, and purchase trend insights.

LEGO Mindstorms robot/Engineering Design 1200

Jan 2025 – May 2025

- Built and programmed an autonomous robot using LEGO Mindstorms as part of a semester-long robotics project focused on real-world navigation and task execution.
- Engineered the robot to navigate obstacle courses, follow lines, and pick up bins, combining mechanical design with precise movement control, alongside material analysis and sorting logic to identify bin contents.

Supermarket database management system

April 2023 – Feb 2024

- Developed a supermarket database system from scratch using Python and MySQL, implementing efficient data storage and retrieval mechanisms, showcasing the system's functionality, emphasizing design effectiveness and practical application in managing supermarket operations.

HACKATHONS AND EXTRACURRICULAR EVENTS

MAKEOHI/O | The Ohio State University, Ohio

March 28 – 30, 2024

- Built *AlziE*, an AI-powered voice assistant (developed in 24 hours) for individuals with Alzheimer's and dementia, integrating speech recognition, NLP, and sentiment analysis to provide memory aids, detect stress, and deliver supportive responses such as reminders, music, or breathing exercises.

RevolutionUC | 1819 Innovation Hub, University of Cincinnati, Ohio

March 1 - 2, 2024

- Designed and developed DoseWise, a web-based application for Type 1 diabetics that calculates insulin dosage from fast food items while providing real-time nutritional analysis to support informed dietary decisions.

SKILLS

Programming & Tools: Python (NumPy, Scikit-learn, Pandas, pdfPlumber, Spacy), HTML, C++ (Foundational), MySQL, LabView, MATLAB, VBA, Database management system, Excel, Machine-learning (Foundational).

Software & Platforms: Git, GitHub, Linux, Database Management Systems, API Integration.

AVAILABLE TO COOP FROM JAN 2026 TO MAY 2026