# Sahir Hameed

Austin, Texas | sahirhameed@utexas.edu | sahirhameed.com | linkedin.com/in/sahirhameed | github.com/SahirHameed

## EDUCATION

**The University of Texas at Austin**, Austin, TX **Expected Graduation: May 2026**

*BS in Computer Science, BSA in Mathematics; Minor in Business*

- **Relevant Coursework:** Data Structures, Discrete Math, Algorithms and Complexity, Computer Architecture, Operating Systems, Autonomous Robotics, Machine Learning, Computer Networks, Cloud Computing

## EXPERIENCE

**Data Engineering Intern** **May 2024 - Aug 2024**

*Medex Surgical* *Fort Worth, Texas*

- Designed and deployed an inventory management database system to store inventory using Visual Basic for Applications and JavaScript, reducing manual errors by **30%** and saving **15 hours weekly** for operations.
- Streamlined management of over **1.5K** hospital items, improving inventory tracking accuracy across **100+** hospitals by **40%.**

**Computer Science Tutor** **May 2024 - Aug 2024**

*iCode* *Southlake, Texas*

- Instructed lessons in Java, Python, and C++ to **20+ students**, focusing on hands-on projects to build practical skills.
- Identified and resolved a bug in the lesson progress tracking system, preventing a revenue loss of over **$2K in profit**.
- Maintained a **90% satisfaction rate** by customizing lessons to meet individual needs and ensure active engagement.

**Research Fellow** **Dec 2023 - Present**

*Autonomous Robotics Laboratory, University of Texas at Austin* *Austin, Texas*

- Collaborated in a **team of 4** to develop a multi-robot human guidance system using Robot Operating System (ROS), Python, and C++, leveraging GPT-4o to enable robots to guide people throughout the laboratory building.
- Tracked each robot's real-time location using ROS, integrating it with structured GPT-4o prompts to deliver precise navigation and room directions within the building.

## PROJECTS

**Video Game Sales Prediction |** *Python, Jupyter Notebook, scikit-learn* **|** GitHub **Nov 2024 – Dec 2024**

- Worked in a **team of 4** to develop a machine learning model using Python and Jupyter Notebook, aimed at predicting a game's total global sales.
- Removed outliers, filled null values, and engineered new features using Pandas, NumPy, and Seaborn to uncover patterns driving global sales.
- Trained and optimized regression models through hyperparameter tuning, improving the $R^2$ value by **83%** from 0.24 to 0.44.

**Web Page Summarizer |** *JavaScript, OpenAI API* **|** GitHub **Aug 2024**

- Developed a Chrome extension using JavaScript, HTML, and CSS, leveraging Open-AI's GPT-3.5 Turbo to generate concise web page summaries.
- Created scripts to extract web page content and integrated Open-AI API for text summarization functionality.

**Pantry Management System |** *JavaScript (Next.js), Firebase, LLaMA* **|** GitHub **Jul 2024 - Aug 2024**

- Designed a full-stack application using Next.js, Firebase, and JavaScript for real-time pantry inventory tracking and secure user authentication.
- Integrated LLaMA AI to analyze inventory and provide tailored recipe suggestions for the user.

**Recycle Detection Software |** *JavaScript (Next.js), Firebase, LLaMA* **|** GitHub **Mar 2023 - Apr 2023**

- Constructed a recycling detection algorithm in a **team of 4**, integrating YOLO-8, OpenCV, and GPT-4 to determine an object's recyclability status.
- Led system testing using Azure Kinect video streams, achieving a **detection accuracy of 78%** on recyclable objects.

## LEADERSHIP

**Computer Science Ambassador** **Sep 2024 - Present**

*Department of Computer Science, University of Texas at Austin* *Austin, Texas*

- Led tours of the Gates Dell Complex, interacting with prospective students and families to highlight the department's resources and opportunities.
- Conducted one-on-one coffee chats with prospective students, effectively communicating the university's academic offerings and fostering connections to encourage enrollment.

## SKILLS

**Languages:** *Java (Spring Boot), Python, C/C++, JavaScript (React, Next.js, Angular), SQL, Ruby, Swift*

**Frameworks & Platforms:** *AWS, Docker, TensorFlow, JupyterNotebook, Git, Bash, GCP, Langchain, Azure*