**Ankit Roy** 

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#### EDUCATION

# Georgia Institute of Technology

Atlanta, GA

BS in Computer Science; GPA: 4.00

Aug 2023 - May 2026

- o Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Objects and Design
- Tech Lead at GT iOS Club: Guided and empowered a dynamic team of 20 throughout a semester-long journey to develop and present an iOS application.

## EXPERIENCE

Sutherland Global Pittsford, NY

Software Engineer Intern

Jan 2023 - Present

- $\circ \ \ \textbf{Architecture} : \ Designed, \ built, \ and \ tested \ a \ Visual \ Studio \ Code \ extension, \ enhancing \ developer \ productivity.$
- HTML, CSS, and Node.js: Created frontend using HTML and CSS, and built the backend with Node.js.
- Docker: Developed containerized environments to scale the application.
- Impact: IDE extension is actively utilized by hundreds of developers across Sutherland and their clients.

## Cornell University

Ithaca, NY

Research Intern

May 2022 - Jan 2023

- Parser: Created a parser using C++ and Bison that would serve as an environment to test optimization theory.
- Algorithms: Developed an algorithm that optimizes program execution using floating point approximations.

## University of Connecticut

Storrs, CT

Research Intern

May 2021 - Sep 2021

- **Tensorflow**: Used Python and Tensorflow to devise machine learning model that can detect SIP (spontaneous intestinal perforation).
- Collaboration: Coordinated with PhD student, Head of CS Department, and doctors at Hartford Children's Hospital.
- **REST API**: Created REST API and web app to leverage the capabilities of the model.
- Presentation: Presented findings at Connecticut Children's Research Institute.
- Impact: Model and application are now used by approximately 300 doctors in Connecticut Children's Care Network.

#### PROJECTS

# Code Buddy

Visual Studio Code Extension

- **Description**: Code Buddy is an IDE extension that harnesses LLMs to optimize the coding experience for developers.
- Retrieval-Augmented-Generation: Developed a RAG framework using Chroma DB as the vector database.
- o Ollama: Constructed a modelfile to create custom Ollama models.
- o Technologies: Node.js, HTML, CSS, Chroma DB, Docker, PostgreSQL

#### SIP Predictor

Web Application and Machine Learning Model

- **Description**: SIP Predictor is a program that utilizes a variety of factors such as birth weight and Apgar score to determine the likelihood that an infant has SIP (spontaneous intestinal perforation).
- **Tensorflow**: The app harnesses Tensorflow to develop logistic regression ML model, which achieved an accuracy rate of over 98%.
- Technologies: Python, Tensorflow, REST API, HTML, CSS, JS

#### SKILLS

- Programming Languages: Java, Swift, Python, Javascript, Node.js
- Frameworks/Technologies: iOS, Android, Docker, PostgreSQL, Git