

Nirjhar Deb

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EDUCATION

Georgia Institute of Technology
Bachelor of Science in Computer Science

Atlanta, GA
May 2025 (Expected)
GPA 3.67

WORK EXPERIENCE

Uber
Software Engineering Intern

Sunnyvale, CA
May 2023 – August 2023

- Implemented a near-real time data streaming pipeline using **Java**, **Golang**, and **Apache Cassandra** to compute and store the haversine distance between the driver's leave-at-door photograph and the eater's address. This will help identify delivery fraud, saving over \$14 million annually.
- Redesigned the trip-streaming pipeline in **Java** to filter out non-production data with 83% accuracy, helping resolve a bug where excess input data delayed the processing of critical Kafka messages by a few hours.
- Spearheaded the development of a 7-person hackathon project to use **Python** to integrate the **GPT-4 large language model** in customer service chats, enabling support agents to quickly detect negative customer behavior.

AT&T
Software Engineering Intern

Dallas, TX
June 2022 – August 2022

- Upgraded an internal network access service by using **Python** and **Django** to transition from cookie authentication to the **SAML** open standard, providing over 1,300 employees with a more secure, single sign-on process.
- Pioneered a novel infrastructure to stream video games with 70% lower latency, which was prototyped as a **C++** text-based game engine and visualized in **Figma**. This invention is awaiting patent approval.
- Developed scripts in **Python**, **SQL**, and **HTML** to uncover security vulnerabilities by parsing event logs and to reveal business insights by automating data exports. Written and tested using the **PuTTY** SSH client.

PROJECTS

Multiplayer iOS QuizApp | *Swift, SwiftUI, Python, Django*

January 2023 – May 2023

- Utilized **Swift**, **SwiftUI**, and Apple Game Center to build a multiplayer live quizzing feature to empower 160+ students each semester to practice questions for Georgia Tech's Introduction to Signal Processing class.
- Integrated secure user authentication, quick matchmaking, and stable game session hosting in the iOS app to provide a smooth, low latency gaming experience for up to 20 players across the globe.
- Mentored an **Agile** team of 5 students to use **Python** and the **Django REST** framework to parse and retrieve sample questions and answers from a signal processing textbook over 500 pages long.

Intelligent Tutoring System Chatbot | *Python, SQL*

January 2022 – December 2022

- Collaborated with 4 students to implement an intelligent autocompletion feature, which suggests questions the user can ask the chatbot based on a few words of input.
- Developed ranking algorithms in **Python** to efficiently sort over 6,000 of the chatbot's suggested questions from a local **SQL** database using different factors, such as the number of words from a textbook's index. This helps the chatbot suggest the most relevant questions to the user in under 50 milliseconds or less.
- Programmed a spellcheck algorithm in **Python**, which autocorrects the user's words with 80% accuracy prior to autocompleting their question.

TECHNICAL SKILLS

Languages: Java, C++, Python, C, Golang, Swift, HTML, SQL, JavaScript

Frameworks: Django, JUnit, SwiftUI

Developer Tools: Git, Docker, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Coursework: Data Structures, Computer Architecture, Object-Oriented Programming, Discrete Mathematics