# Nirjhar Deb

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## **EDUCATION**

AT&T

**Georgia Institute of Technology** *Bachelor of Science Computer Science* 

Atlanta, Georgia

Expected Graduation, May 2025

GPA 3.43

WORK EXPERIENCE

Dallas, Texas

Software Engineering Intern

*June* 2022 – *August* 2022

- Upgraded AT&T's Inspected Network Access Program (INAP) by using **Python** and **Django** to transition from cookie authentication to Security Assertion Markup Language (SAML), providing over 1,300 employees and contractors a more secure, single sign-on login process.
- Developed scripts in **Python**, **SQL**, and **HTML**, which were tested using the **PuTTY** SSH client, to reveal valuable business insights, uncover cybersecurity vulnerabilities, and refactor outdated code in INAP.
- Contributed to a text-based game engine developed in C++ and visualized in **Figma**, as a part of an **Agile** team project to demonstrate how AT&T can create faster, less memory-intensive gaming experiences.

## **PROJECTS**

## **Georgia Tech Integrated Tutoring System Chatbot**

Atlanta, Georgia

Software Developer

January 2022 - Current

- Collaborated with two students to implement a smart autocompletion feature to predict the user's question to the chatbot based on a few words of input.
- Spearheaded the development of a spellcheck algorithm in **Python**, which autocorrects the user's words prior to autocompleting their question.
- Built a local **SQL** database of over 6,000 previously asked questions, helping the chatbot autocomplete similar queries and add new questions to the database.

### **Personal Portfolio Website**

Atlanta, Georgia

Full Stack Web Developer

December 2021 – Current

- Assembled an aesthetic, user-friendly website using GitHub Pages, HTML, and CSS to introduce myself, ongoing projects, and points of contact.
- Utilized **JavaScript** to retrieve a user's personal details from a contact form and send them to a secure Realtime Database hosted by Google Firebase.
- Overhauling front-end code to improve search engine optimization and ease of use on mobile devices.

## **HackGT 8: Food Analyzer and Nutrition Tracker**

Atlanta, Georgia

Hackathon Team Member

October 2021 – October 2021

- Imported **Python's** OpenCV library to utilize the computer webcam to take a photograph of a food item and employed Google Vision's API to process the image and recognize the food.
- Scanned and parsed the FoodData Central database to find the food's nutrition information.
- Designed a graphical user interface using the **PyQt** toolkit to display the food photograph and nutrition details.

#### American School of Doha Technology Club

Doha, Qatar

Game Development Lead

*January 2020 – May 2020* 

- Coordinated a team of 14 developers to construct 2D, 3D, and virtual reality games using C# and 3D modeling in Unity Game Engine and Unreal Engine 4.
- Showcased games to more than 200 students and parents at the local MakerFaire and Qatar National Library.

### **SKILLS**

Programming: Java, Python, HTML, SQL, CSS, JavaScript, C++, C#

Frameworks and Tools: Django, GitHub, Visual Studio Code, IntelliJ, PuTTY, CLion, PyCharm, Figma

Relevant Coursework: Data Structures, Object-Oriented Programming, Discrete Mathematics