# **Shreyal Sharma**

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#### Education

#### **New Jersey Institute Of Technology**

- Expected Graduation: May 2026 Bachelor of Science in Computer Science | Minor in Communication | GPA: 3.7 | Dean's List Scholar
- Recipient of NJIT Academic Excellence Scholarship and Freshmen Highlander Scholarship
- Relevant Coursework: Data Structures and Algorithm, Information Systems, Web Development, Data Mining

## Experience

#### Research Assistant, Epimedium Crowdsourcing Project (Python, Scikit-learn, Jupyter Notebook)

Newark, N.J.

Department of Data Science, NJIT

July 2024 – Present

- Contributed to a project focused on understanding how online crowds collaboratively generate cancer-related scientific knowledge, enhancing role-expertise mapping accuracy by 30% through keyword filtering in Excel
- Developed a Python script in Jupyter Notebook to automate the analysis of 3 extensive datasets
- Calculated Cosine Similarity scores between initial posts and their comments/replies using the Scikit-learn library, reducing manual processing time by 40% and increasing the accuracy of insights by 25%

## Research Assistant, Neuroscience Connectome Project (C++, Chapel, Arkouda)

Newark, NJ

Department of Computer Science, NJIT

*May* 2024 – *August* 2024

- Contributed to a cutting-edge project focused on mapping the human brain's network using Arkouda for scalable data analytics and visualization, enhancing the ability to process and analyze large-scale brain datasets
- Installed and utilized Chapel for parallel programming, increasing the efficiency of graph search algorithms by 5x, which accelerated data processing and analysis

## **Computer Science Tutor** (Python)

Remote

Blissful Coding

March 2024 - June 2024

- Led a 6-week tutoring program, teaching Python to 24 students in grades 6-8, and dedicated 2 hours each week to peer-to-peer mentorship
- Collaborated with 4 instructors to deliver a curriculum focused on advanced Python topics, enhancing students' understanding and coding skills

# **Projects**

## AI Customer Support chatbot (Next.js, OpenAI API, Material UI)

August 2024

- Developed an AI-powered chatbot designed to assist users with AI-powered interview preparation
- Implemented a server-side route using Next.js for chatbot to efficiently handle user queries, ensuring seamless chat interactions by leveraging GPT-3.5-turbo for accurate and responsive support
- Optimized the API calls to reduce response latency by approximately 15%, ensuring faster and more reliable user interactions

#### Pantry Tracker (Next.js, Material UI, Firebase)

August 2024

- Built a manufacturing inventory system using Next.js, Material UI, and Firebase
- Developed a responsive CRUD interface that allows users to efficiently manage and track inventory
- Designed the frontend with Material UI, and integrated Firebase for real-time data storage and retrieval

#### Compiler for Fortran Language (C++)

February 2024

- Developed a compiler for a Simple Fortran 95-Like Language using C++, including a lexical analyzer and a parser-interpreter
- Reduced debugging time by approximately 30% through comprehensive error messaging, which enhanced the reliability and usability of the compiler

Professional Development: CodePath, Rewriting the Code, Women in Computing, Kids Who Code, Vector Newspaper Certifications: Python Certified Associate Programmer, Technical Interview Prep: CodePath

Skills: Python | Pandas | Scikit-learn | Java | C++ | Node.js | HTML/CSS | Git | Github | VSS | Jupyter Notebook | OpenAI API