

Simran Singh

Computer Science & Neuroscience Scholar

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Summary

Highly motivated strategic thinker with over three years of experience in full-stack web development, data engineering, and AI system evaluation. Proficient in multiple programming languages including Python, Java, JavaScript, MATLAB, and SQL. Well-versed in agile methodologies, SDLC and object-oriented programming principles. Experienced with relational databases (SQL) and NoSQL databases (MongoDB) for efficient data storage and retrieval. Demonstrated abilities in conducting gap analyses, identifying model deficiencies, and providing insightful recommendations to improve LLM performance through ongoing AI consulting experience. Skilled in data migration and ETL processes.

Experience

Adobe Student Ambassador @ Boston University

July 2024 - Present // Boston, MA

- ▷ Formulated a marketing plan, strategized tactics to shape the program and carried out initiatives to reach students and professors interested in learning more about Adobe.
- ▷ Promoted Adobe through content creation and advertising through personal social media channels to drive student awareness, leading to increased use of Adobe Creative Cloud.

AI Consultant @ Outlier (Scale AI)

January 2023 - Present // Boston, MA

- ▷ Evaluated AI system responses for accuracy, creativity, and appropriateness, while identifying areas for improvement in logic and reasoning
- ▷ Conducted gap analyses between model outputs and desired capabilities
- ▷ Provided specific recommendations to address programming deficiencies

SWE Intern @ Executive Office of the President, Office of Management & Budget

June 2022 - August 2022 // Washington, DC

- ▷ Developed novel recommendations to BSB senior management in support of OMB's strategic transition from Shared Government Services to commercial cloud services.
- ▷ Assessed current OMB capabilities and gaps in efficient data extraction and loading methods from MAX Federal Community Page to MS SharePoint
- ▷ Tested python scripts for data parsing and developing migration routes
- ▷ Systematically reported findings to BSB and OMB leadership to support continued efforts to manage data migration in a manner that supports federal-wide operations.

Education

Boston University, BA Computer Science & Neuroscience

Sep 2021 - May 2025 // Boston, MA

- ▷ **Honors:** Grace Hopper Conference Attendee, Richard Tapia Conference Attendee
- ▷ **Relevant Coursework:** Analysis of Algorithms, Computer Systems, Probability in Computing, Software Engineering, Intro to Databases, Principles of Neuroscience, General Chemistry, Cell & Molecular Biology, MATLAB Programming for Brainsciences
- ▷ **Activities:** BostonHacks-Tech Team FullStack Developer, Undergraduate Women in Science and Engineering, Chess Club.

Certifications

Collibra Data Steward – Collibra University, 2024

Workflow Basics – Collibra University, 2024

Workflow Designer – Collibra University, 2024

Skills

Programming Languages

Python, Java, JavaScript, JSX, TypeScript, C, OCaml, MATLAB, HTML/CSS, SQL, XML

Tools

MS Suite, Git, VS Code, Linux, UNIX, Express Framework, React, Node, Vite, MongoDB, Collibra, Flowable, Figma, SciPy, TensorFlow, Google Cloud, REST APIs

Projects

"Amber"-VR Memory Palace

Hacklytics2024@GeorgiaTech

Created an interactive platform to rejuvenate the classic Memory Palace study method into a customizable VR experience for students and learners alike. Implemented with a Python backend and a React frontend, along with OpenAI's DALLE 2 system and the Chakra UI

AI Connect 4 – Interactive Game

Programmed classic board game using Python to demonstrate object-oriented programming skills. Created AI computer component by implementing an algorithm for counter moves

8 Puzzle Solving Program

Designed program in Python to solve any standard 8 puzzle with optimized efficiency. Polished skills with performance testing and algorithm design.

"CareMate" – Healthcare Platform

Designed and Implemented a healthcare platform to help users track and achieve their health and wellness goals. Implemented using the MERN stack as well as the Spoonacular and ChatGPT APIs.