Soham Jain

📞 (240) 728-8946 ✉ sohamj@andrew.cmu.edu 🔗 sjain2025.github.io in linkedin.com/in/soham-jain1 ⓞ github.com/sjain2025

Education

Carnegie Mellon University   **December 2027**
Bachelor of Science in Computer Science   *Pittsburgh, Pennsylvania*
- **Concentration:** Machine Learning
- **Relevant Courses:** Data Structures and Algorithms, Artificial Intelligence, Applied Machine Learning, Discrete Math, Linear Algebra, Multivariable Calculus, Computer Vision, Mobile & Web Application Development, Research Statistics, Physics, Biology, Psychology

Technical Skills

Languages: Python, Java, C++, C/C0, JavaScript, SQL, HTML/CSS, TypeScript, Q#, LaTeX
Developer Tools: Git, Vim, VS Code, MongoDB, Google Cloud, AWS, Azure, Firebase, Jira, Android Studio, Jupyter Notebook, Figma
Libraries & Frameworks: React, Node.js, Next.js, Flask, PostgreSQL, NumPy, Pandas, TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV

Experience

Vytal.AI   **May 2022 – June 2025**
Software and Machine Learning Engineer   *Alexandria, Virginia*
- Developed a smartphone AI application quantifying brain health using novel gaze-tracking algorithms
- Designed scalable business model, securing $1.2M in seed investments ($12.5M valuation)

Virginia Tech   **April 2024 – May 2025**
Computer Science and Quantum Computing Researcher   *Blacksburg, Virginia*
- Spearheaded undergraduate research with Dr. Atul Mantri on graph coloring with Grover's Algorithm
- Conducted literature reviews to identify gaps in contemporary quantum computing research

Projects

RoutineRemind   **June 2022 – Present**
- Developed provisional patented scheduling app for individuals with speech and cognitive disabilities
- Deployed on Google Play and App Store; selected by U.S. Representative Jennifer Wexton

CMUEats   **Aug 2025 – Present**
- Something

EyeLS   **August 2023 - Present**
- Project description

Research & Publications

LapseNet: A Hybrid CNN-LSTM Approach for Accurate and Efficient Vision-Based Fall Detection
6th International Conference on Robotics and Computer Vision (ICRCV)
- Best Presentation Award

A Transformer-Based Approach to Diagnose ALS via EEG Analysis
17th International Conference on Advanced Computer Theory and Engineering (ICACTE)
- First-author paper on diagnosing ALS in two minutes

RexDash: A Dashboard for Analyzing the Performance of Replica Exchange Molecular Dynamics Simulations
Journal of Student-Scientists' Research
- First-author publication with Dr. Christopher Lockhart at George Mason University

Leadership

Youth International Digambar Jain Organization   **February 2022 - Present**
President and Co-Founder
- Leadership achievement or responsibility