Dhyey Dharmendrakumar Mavani

✉ dmavani25@amherst.edu ✉ ddmavani2003@gmail.com ☎ (413) 275-0720
GitHub: https://github.com/DhyeyMavani2003 LinkedIn: https://www.linkedin.com/in/dhyey-mavani-986b4719a/

📚 Education

Amherst College | Amherst, MA | *Bachelor of Arts in Computer Science and Mathematics* **Expected 2025**
Fall 2021: Data Structures, Data Science, Intro to Economics, Philosophy of Progress
Spring 2022: Distributed Algorithms, Networks, Cryptography, Stochastic Processes, Public Choice, Writing About Humor
Activities: CS Club, Quant Trading Club, Math Club, Investment Club, Consulting Club, Badminton and Archery
Coursera | Remote, USA | *Professional Specializations from Google, IBM and INSEAD* **2020–2021**
Coursework: Google Data Analytics and Project Management, IBM Data Science and Applied AI, INSEAD Blockchain
Stanford University | Stanford, CA | *Pre-Collegiate University-Level Online Math and Physics* **2018-2019**
Coursework (9 credits): Multivariable Calculus, Intermediate Mechanics I, Light and Heat
P.P. Savani Cambridge International School | Surat, India | *IGCSEs, A-levels, SAT Subject Tests & AP exams* **2017–2021**

💼 Experience

Rebellion Research | Remote, USA | *Quantitative Research and Development Intern* **Sep 2021–Present**
 – Coding and Backtesting **algorithms** for **quantitative research** on *quantconnect.com* using **Python and C#**
 – Working with the CIO on **financial research**; writing articles; **statistical modeling**; interviewing leaders.
Amherst College | Amherst,MA | *Software Developer & Projects Manager at AI in Liberal Arts Initiative* **Feb 2022–Present**
 – Curating **software tools** for community; developing and refining **documentation** and **web-based** resources
 – Working with students and faculty members on the use of **AI** for research and education across the **liberal arts**.
JPMorgan Chase and Co. | Remote, USA | *Software Engineering Virtual Experience* **Dec 2021–Jan 2022**
 – Developed a user-friendly tool to display share price data; Experienced establishing financial **data feeds**, **front-end**, and visualization with **Perspective**; used **Python** to work with financial statistics and generated **unit tests**.
Code Club by Raspberry Pi Foundation UK | India | *Founder and Project Manager* **April 2019–May 2021**
 – Expanding knowledge through training from **Raspberry Pi** to ensure up-to-date teaching and learning resources
 – Teaching **Scratch**, **Python**, and **Java** to **57** *9-13 year-olds* through making animations and projects
Renewable Energy Department, JAU | India | *Computational & Data Researcher* **April 2018–Jun 2019**
 – Gauged, both statistically and economically, different factors individually and in tandem, while exploring various patterns of placing PV panels in search of the most efficient method; became **Genius Olympiad Finalist-2020**
 – Developed mathematical models using **FORTRAN** for implementation of the energy balance equations to compare predicted and measured data, which proved to be a great help to farmers in terms of greenhouse efficiency.
Greenpeace International | India | *West-zone leader, Founder & Project Manager: Pollution Project* **Jun 2020–Nov 2020**
 – Proposed and led a project with the motto of analyzing air pollution data pre/during/post-COVID-19 to propose policies by creating a **website** and managing operations for a team of **30** people, ranging from **tech to humanities**.

🔨 Projects

Note-Taking Web App	HTML, CSS, JavaScript, Netlify, GitHub VS Code
Multi-threaded Application for Randomized Account Keeping	Java, OOP, GitHub, VS Code
Sudoku Solver with GUI and Backtracking Algorithm	Python, GUI, Algorithms, GitHub, VS Code
File Compressor using Huffman encoding generation	Java, OOP, GitHub, VS Code
Data-Link Layer Error Detector in Network Communication	Java, CRC & Parity Checksum, GitHub
Client-Server System of Exchanging "Fortune Cookies"	Java, Socket Programming, GitHub, VSCode
Calendar Query for efficient time-tracking and management	R, RStudio, Data Analysis, LaTeX, GitHub
Shiny App and Blog Project for COVID-19 Data Analysis	Shiny, R, RStudio, Data Analysis, LaTeX, GitHub

✋ Skills

Technical: Python, R, R Studio, Java, LaTeX, Git/Terminal, VSCode/IntelliJ, Data Analysis/Science, HTML/CSS, JavaScript (React), WordPress, AI, ML, Scratch, Flask, FORTRAN, Kaggle, Google Suite, Microsoft Office Suite, C#.
Language: English (native), Hindi (native), Gujarati (native), Sanskrit (proficient)
Interests: Mentoring, Leadership, Technology, Finance, Traveling, Badminton, Archery, Meditation, Quad Biking, Hiking.

🏆 Honors and Awards

Represented Amherst College at **9th UChicago Midwest Trading Competition** as the only freshman on the team
World Topper and Champion Award in **Asian International Mathematics Olympiad (AIMO-2020)**
1st Runner-up globally in **World International Mathematics Olympiad (WIMO-2020)**
Bloomberg Markets Certification (BMC) by completing: Economic Indicators, Currencies, Fixed Income and Equities
Pramerica Spirit of Community Award for Impactful Volunteering over 5 years
Emerging Scientist Award for consistent contributions at a young age