Visvam Rajesh

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Skills

Programming Python, C, C++, Java, JavaScript, TypeScript, HTML, CSS, Rust, C#
Technologies React, Bootstrap, Node.js, Next.js, MongoDB, Raylib, Numpy, Scikit-Learn, Jupyter, ROS 2, Linux
Languages English, Tamil, French

Education

2025 - 2028 **Carnegie Mellon University** (GPA: 4.0/4.0)
BS Computer Science & Robotics
Selected Coursework: Introduction to Computer Systems, Great Practical Ideas for Computer Scientists, Principles of Imperative Computation

2021 - 2025 Hunterdon Central Regional High School (WGPA: 4.43/5.00)
Honors: Honor Roll, National Merit Scholar High School Diploma
Selected Coursework: AP Computer Science, AP Calculus ABC, Honors Linear Algebra, AP Physics C, Honors Discrete Math

Work Experience

ScottyLabs Sept 2025 - Present
Software Engineer
Working on CMU Courses website backend. Developing student schedule creation heuristic. Using Rust and Typescript. Over 5k users/wk on the site.

Carnegie Mellon Racing Sept 2026 - Present
Driverless Path-Planning Developer
Building SLAM and Trajectory algorithms for an all-electric race-car using C++, Python, and ROS 2.

Visra Solutions June 2024 - Aug 2024
Software Developer
Worked on modular data displays in React. Used SciKit Learn, Numpy, Pandas, MatplotLib to train models and visualize data. Used AWS instances to run tests and programs.

The Daleks, FIRST Robotics Competition Team 3637 Sept 2021 - Jun 2025
President (June 2024 – June 2025), **Programming Captain** (May 2023 - June 2024)

- Just under 6 weeks to design, build, and program a robot along with my peers to compete.
- Won Montgomery District Event; Qualified for world championships in Houston, Texas; Received the FIRST Impact Award, the most prestigious award available in competition.
- Programmed in C++ and Python; Worked on perception and path-planning, LiDAR using ROS 2.

Projects

Password Manager (Link) July 2025

Created encrypted password database using Fernet encryption keys. Used Textual to create a TUI for an interactive user experience. Written in Python.

Publications

Rajesh, Visvam and Chase Q. Wu (2024). "An Extension of Pathfinding Algorithms for Randomly Determined Speeds". In: *2024 IEEE International Performance, Computing, and Communications Conference (IPCCC)*, pp. 1–8. DOI: 10.1109/IPCCC59868.2024.10850316.