

Rachit Gupta

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[LinkedIn](#) | [Personal Website](#) | [GitHub](#)

Skills

Circuit Design: Proficient in PCB Design.

Programming Languages: Skilled in Python, C++, and HTML;

experienced with Python-SQL Connector and OpenGL (C++).

Software and Technologies: Proficient in Git, KiCad, and Arduino Programming;

adept with VSCode, XCode, and Advanced Excel.

Education

SEP 2022 - APR 2026

University of California, Santa Barbara - Bachelor of Science, Computer Engineering

CGPA: 3.83 out of 4.0 with Dean's Honors (ENGR)

Relevant Coursework: Python, C++, Arduino Programming, PCB Design, Data Structures & Algorithms, Object-Oriented Design

Experience

MAY 2021 - JULY 2021

We Founder Circle, Remote - Research Analyst

We Founder Circle is a venture capitalist firm, playing a huge role in the Indian startup ecosystem. I as a research analyst there conducted in-depth research and analysis in the Healthtech and Fintech sectors. I prepared trend analysis reports and attended startup pitch sessions.

MAY 2020 - JULY 2020

JB Ecotex, Surat, India - Business Intern

JB Ecotex is the second largest recycler of PET bottles in India. I interned in their business development, marketing, and R&D departments. I understood the process of recycling PET bottles, understood how they were trying to produce more virgin-like quality material in their upcoming project, and prepared numerous articles and detailed reports on that.

Projects

VGA Display Control with Arduino

Developed a game similar to Piano Tiles, implemented on an Arduino UNO with VGA output. This project involved intricate memory management, utilizing 97% of the Arduino's capacity, to successfully drive a VGA display.

Development of a Python-Inspired Scripting Language (C++, [GitHub](#))

Developed a dynamic scripting language with Python-like syntax and functionality using C++, featuring an advanced interpreter, variable management, and control flow constructs, emphasizing modular design and documentation.

Development of a Crossy Roads alike game (C++, OpenGL, [GitHub](#))

Engineered a level-based arcade game similar to Crossy Roads using C++ and OpenGL, focusing on escalating challenges and team collaboration through GitHub for version control.