

Pranay Mallik

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EDUCATION

University of California, Berkeley

December 2025

B.A. Computer Science

Berkeley, CA

3.6 / 4.0 GPA

Relevant coursework: Structure and Interpretation of Computer Programs, Data Structures and Algorithms, Discrete Mathematics and Probability Theory, Principles and Techniques of Data Science, Introduction to Robotics, Introduction to Artificial Intelligence, Computer Architecture, User Interface Design and Development, Financial Accounting, Introduction to Finance, Investments, Computer Security

Organizations: Alpha Delta Phi (Philanthropy Chair/Exec Board), Interfraternity Council (Vice President of Internal Operations/Treasurer)

RELEVANT EXPERIENCE

Software Development Engineer

June 2026 – Present

Amazon Web Services

Arlington, VA

- Part of AWS EC2 TimeSync

Software Development Engineer Intern

May 2025 – August 2025

Amazon Web Services

Arlington, VA

- Worked on EC2 Nitro team to enhance CPU performance optimization and hardware qualification processes
- Developed automated data analysis feature for hardware qualification testing, reducing manual analysis time for 40+ hours of test data, saving 250+ hours of review time per year
- Built scalable metric analysis solution leveraging AWS services including EC2, S3, DynamoDB, and CloudWatch to deliver robust performance insights
- Implemented comprehensive unit and integration test coverage to ensure production-ready code deployment

Software Engineer Intern

May 2024 – August 2024

Intuit, Inc

Mountain View, CA

- Contributed to Customer Data Cloud, an internal GraphQL-based customer data lookup tool
- Engineered sorting functionality for result datasets containing 1000+ queries, enhancing data analysis capabilities
- Implemented constant-time filtering operations using DynamoDB across all customer metrics and queries
- Developed comprehensive test suites including unit tests and Karate API tests to ensure memory efficiency and performance optimization before production deployment

Summer Software Engineer Intern

June 2021 – August 2021

Kloudfuse

Cupertino, CA

- 10 Week internship at a Cloud Monitoring focused startup
- Developed Python-based data extraction tools using BeautifulSoup to retrieve and parse GCP and AWS performance metrics
- Implemented automated data pipeline to store extracted metrics in structured CSV and YAML formats for analysis and reporting
- Utilized collected metrics data to configure and populate CloudWatch monitoring clusters for enhanced cloud infrastructure visibility

PROJECTS

Tile World Game Java, Git

Engineered a dynamic tile-based world generation system with pseudo-random seeds, enhancing user engagement through immersive rooms, hallways, and interactive features. Implemented game play mechanics such as menu navigation, music integration, character movement, and a timed collectible system. Managed a 2000-line Java project, ensuring code quality, modularity, and scalability.

Scheme Interpreter Scheme, Python

Using Python to create a working interpreter for the language Scheme. Able to do all functionalities of the language including but not limited to: mathematical expressions, creation of linked lists, and saving and variables/ creating functions.