Anirudh Sreerama

408-819-8248 | anirudh.s@berkeley.edu | linkedin.com/anirudh1444 | github.com/anirudh1444 | leetcode.com/anirudh1444

Education

UC Berkeley Aug. 2022 - May 2026

Bachelor of Arts - Double Major in Computer Science & Applied Mathematics, Minor in BioEngineering *GPA: 3.89/4.00*

College Courses

- Artificial Intelligence
- Efficient Algorithms
- Computer Security
- Real & Numerical Analysis
- Computer Architecture
- Internet Architecture and Protocols
- Computability and Complexity
- Probability and Random Processes
- Abstract Linear Algebra
- Computational Functional Genomics
- Combinatorial Algorithms
- Database Systems
- Abstract Algebra
- Discrete Mathematics
- Differential Equations

Technical Skills

Languages: Java, Python, C, Go, SQL, HTML, RISC-V, LaTeX
Tools: git, VSCode, IntelliJ, PyCharm, VIM, Maven, AWS, Cloud Development Kit, Jupyter Notebook, Venus, Logisim
Libraries: MongoDB, Pytest, NumPy, Pandas, Matplotlib, OpenCV, LangGraph, DeepFace, Intel SIMD, StdDraw, JFrame

Experiences

Software Development Engineering Intern May 2025 - Aug. 2025

Amazon *Seattle, WA*

- Developed a multifunctional Slackbot integrated with the Prime Video codebase, capable of answering queries and executing code
- Leveraged AWS tools (API Gateway, Lambda, DynamoDB, Simple Queue Service, Fargate) to connect Slack to the Bedrock LLM, store conversation history, and trigger workflows
- Integrated LangGraph, Retrieval-Augmented Generation (RAG), and an MCP server to enhance responses with Amazon Prime Video-specific information
- Improved team productivity by establishing a centralized tool for information access

Contest Problem Writer Oct. 2024 - May 2025

LeetCode *Palo Alto, CA*

- Designed and authored 20+ questions featured in LeetCode's worldwide weekly programming contests with over 30,000 participants (Sample problem link)
- Wrote and generated comprehensive test cases to ensure submitted solutions met specific runtime criteria and conducted secondary reviews for teammates' problem statements

Teaching Assistant - Data Structures Exams Admin & Efficient Algorithms Jun. 2023 - Present

UC Berkeley *Berkeley, CA*

- Collaborated with professors to create 6+ exam questions and provided proof-based solutions to ensure accuracy
- Ran a weekly discussion to review crucial topics and provide creative explanations for practice problems
- Currently teaching an advanced college course, *Efficient Algorithms and Intractable Problems*

Projects

Secure File-Sharing System | *Go, PKE (RSA), AES, UUID, HMAC* Mar. 2025 - Apr. 2025

- Engineered a cryptographically secure file-sharing application, enabling users to store, append, share, and revoke file access while maintaining confidentiality and integrity
- Uses **AES** symmetric encryption when storing files, hybrid encryption for secure sharing, digital signatures for authenticity, **Argon2** key derivation, hash-based **KDFs**, and **UUID**-based secure data addressing

Facial Recognition Detector | *Python, OpenCV, Pandas, DeepFace* Jun. 2024 - Aug. 2024

- Created a facial recognition system with a 92% overall accuracy for our college apartment that replies with personally-curated messages
- Used **OpenCV** and Meta's **DeepFace** library to integrate a hybrid neural network that detects 12 known faces

Optimal Flight Routes Without a Boeing 737 | *Java, MongoDB, File Reader* May 2024 - Jun. 2024

- Utilized search algorithms **(A* Search)** to determine the cheapest flights to take between two locations
- Uses real-world flight and pricing data stored in **MongoDB** to determine the optimal route based on factors such as flight time, number of layovers, and preferred seating arrangements

Sudoku Solver | *Java, JFrame* Apr. 2022 - Jun. 2022

- Developed an algorithm from scratch that uses classic Sudoku-solving strategies along with **recursion** & **backtracking** to list all possible solutions for a Sudoku
- Built a user interface using **JFrame** which allows users to manually input digits into an empty Sudoku board of any size and presents all viable answers in a legible and aesthetic manner