

Yog Tadhani

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EDUCATION

University of Virginia, School of Engineering And Applied Science

Current GPA: 3.8/4.0

Bachelor of Science: Computer Science, Minor: Engineering Business, Bridge Scholar

Graduation: May 2027

Relevant Courses: Software Engineering, Data Structures and Algorithms(Graph Theory included), Machine Learning in Image Analysis, Computer System and Organization(Assembly & C), Applied Circuits, and Digital Logic Design(VHDL), Calculus, and Linear Algebra

SKILLS

Languages: Java, Python, JavaScript, HTML/CSS, SQL/SQLite/MySQL, JSON/XML, C/C++

Tools: Git/GitHub, Wordpress, Google reCAPTCHA, Google Firebase, Unity, MATLAB, Microsoft Office, Linux/Unix, SolidWorks

Frameworks: React, Node.js, JUnit, JDBC, Hibernate

EXPERIENCE

Organised Co

London, UK

Software Engineering Intern

June 2025 - July 2025

- Developed a scalable backend sync system with hexagonal architecture using **Wix REST API** to update supplier product data in real time, efficiently stored in **MongoDB**.
- Used Codex AI agentic coding for rapid prototyping and debugging complex API integrations, improving robustness and reducing sync errors.

UVA Darden School of Business

Charlottesville, VA

General Research Assistant

Sept 2024 - May 2025

- Analyzed mobile money transactions in underrepresented African regions using **Rivanna HPC** (High Performance Computing), leveraging **Python**, **Pandas**, and **NumPy** to uncover financial patterns and market trends
- Designed and implemented optimization models using **Gurobi** to determine optimal farmer-to-market allocations, employing **linear programming**, **LP relaxations**, and integer constraints to maximize system-wide profit and efficiency

IRDI Business Group LLC

Remote; CA

Tier 1 Supervisor, Web Development Division

Jan 2025 - May 2025

- Led development of a secure company website using **Laravel**, **PHP**, and **SQLite** with **MVC architecture**, managing admin and visitor interfaces while enforcing robust security practices

Web Developer Intern

Aug 2024 - Dec 2024

- Recovered company systems post-cyber attack by implementing advanced security protocols, optimizing website performance through **WordPress**, and registering software, ensuring compliance and operational integrity
- Increased website traffic to 20K views and onboarded 300+ users by enhancing WordPress content, customizing themes, and securing contact forms with **Google reCAPTCHA** to reduce spam and improve user trust

UVA Department of Physics

Charlottesville, VA

Quantum Physics Research Assistant

Aug 2023 - May 2024

- Developed a computational model using **Python**, optimizing optical algorithms to achieve precision in holographic laser beam shaping and enhance the prediction of light patterns
- Utilized **NumPy** and **Matplotlib** for extensive data analysis and visualization, translating raw data into insights that supported precision in holographic laser experiments and quantum state measurement

PROJECTS

UVA Bus Route Management Database System | *SQL/SQLite, RESTful API/Data Parsing, Java, JSON, JDBC*

- Designed and implemented an SQLite database to store and manage bus route data, utilizing SQL queries to create tables and ensure efficient data retrieval and storage
- Integrated with UVA Devhub API to fetch and parse JSON data in structured Java objects for seamless handling and persistence in database
- Implemented algorithm to compute closest bus stop and recommend optimal bus line for the user

Karabi(Timely Communication Mobile App) | *Backend Team Lead* | *React Native, Expo, Google Firebase, Node JS*

- Developed in React Native and Expo using Google Firebase for a secure user-friendly, cross-platform interface
- Managed group of students with weekly meetings, task handling, and lectured on mobile development
- Implemented smooth front-end to back-end (Node.js) integration, optimizing user interaction and real-time capabilities

Zombie Game(A Shot in the Dark) + SunnyLand Game | *Unity, C#, Google Firebase, VS Code*

- Developed smart inventory and camera systems using Unity's libraries, showcasing logic development and system optimization
- Implemented Google Firebase for user authentication and secure progress storage, supporting smooth and secure gameplay