Rayhan Noufal Arayilakath

rayhan@purdue.edu | linkedin.com/in/rayhanadev | github.com/rayhanadev |rayhanadev.com

Summary

Ray is a self-taught full-stack software engineer with 4+ years of experience building scalable cloud systems, shipping customer-first products, and driving growth at Y Combinator-backed startups. He has a proven track record in early-stage product development, infrastructure design, and anti-abuse systems. He is skilled in leading technical initiatives that cut costs, improve performance, and enhance user experience. He is graduating with a dual-major in Cybersecurity and Network Engineering from Purdue University (Class of 2027).

Experience

Million (YC W24), San Francisco, CA   June 2025 – Present
Founding Software Engineer, Platform

- Designed and implemented a Go-based system to detect and halt crypto miner and other resource abuse, **saving ~$1.5K/month** in compute costs.
- Rewrote and optimized an HTTP/2 edge proxy in Go, reducing latency by 5x and boosting throughput across distributed workloads.
- Architected a novel container manager for cost-optimized warm pooling of Firecracker micro-VMs and wrote a custom protocol for stateful agent execution environments, enabling rapid provisioning (<100ms) and minimizing cold starts.
- Developed an Amazon S3-based virtual filesystem provider in Rust that intelligently requests and caches files, **delivering virtually unlimited project storage with ~10-20ms mount times**.
- Initiated development of a local-first dev tool that fits seamlessly into developer workflows, bringing agentic efficiency to on-device environments.

MeetYourClass, Ann Arbor, MI   Jan 2025 – May 2025
Software Engineering Intern, Growth

- Implemented a streamlined onboarding flow, increasing performance with React Scan and React Query, simplifying the student registration process, **increasing setup conversion by 60% and improving user activation at the top-of-funnel**.
- Refactored the image watermarking pipeline to use native Canvas APIs, significantly improving render speed and reducing end-user latency in image-heavy workflows.
- Led migration from Algolia to Elasticsearch for core search functionality, **decreasing query latency and cutting third-party search costs by 40%**.
- Improved spam detection systems by fine-tuning content heuristics and implementing lightweight server-side filters, reducing false negatives and improving moderation accuracy across student posts.
- Investigated and identified leaked coupon codes using traffic analysis and usage patterns, leading to targeted revocations and policy updates that prevented further abuse and protected promotional integrity.

Replit (YC W18), San Francisco, CA   Mar 2023 – May 2024
Software Engineering Intern, Anti-Abuse

- Developed a scalable, event-driven moderation platform in Typescript + Golang with 20+ identifier modules and response pipelines, supporting 30+ high-throughput real-time ingestion channels from diverse platforms.
- Applied Python + SQL analytics to detect credit card abuse patterns, reducing incident response time and **saving ~$3.5K per month in resource abuse** and costs from fighting chargebacks.
- Built a multithreaded scraper to revoke exposed API tokens, **safeguarding 6,000+ customers** and further developed automated token-hiding features in the editor with advanced clipboard-parsing.
- Enhanced phishing takedown tooling, automating **removal of 2,000+ malicious websites in one month**.
- Implemented advanced detection pipelines on large datasets using Hex, Apache Dataflow, and micro-services in Typescript, identifying high-volume abuse before escalation.
- **Extended internship 4 times due to strong performance**, collaborating for over a year beyond initial contract.

Deel (YC W19), San Francisco, CA   Sept 2022 – Dec 2022
Software Engineer Intern, Marketing
- Built and shipped a full-stack content management tool that streamlined blog search and indexing, enabling the marketing team to manage and surface content more efficiently.
- Integrated an analytics dashboard to track engagement and conversion metrics, providing data visibility that informed multiple campaign strategies.
- Improved search performance with backend optimizations, enhancing discoverability for global users.
- Automated manual workflows for content updates, reducing weekly marketing overhead by ~5 hours and improving team productivity.
- Partnered with cross-functional stakeholders to iterate on tooling, leading to higher adoption across the global marketing team.

Education

Purdue University, West Lafayette, IN   May 2027
Bachelor of Science, Cybersecurity + Infrastructure and Network Engineering with Honors
- Minors: Organizational Leadership
- President – Purdue Hackers (purduehackers.com)
- Undergraduate Researcher with Purdue Tech Justice Lab

Westlake Academy, Westlake, TX   June 2024
International Baccalaureate Diploma
• Honor Roll 2020-2024
• IB Computer Science Student of the Year 2024
• National Merit Commended Scholar
• President – Westlake Academy Computer Science League Team
• Founder – Westlake Academy Hack Club (hackclub.com)
• Founder – Westlake Academy Audio/Video Broadcasting team

Skills

Languages: Javascript/Typescript (5yrs), Python (5yrs), SQL (4yrs), Golang (3yrs), Java (3yrs), Rust (2yrs), C (1yrs)
Software: AWS, GCP, Docker, Kubernetes (K8s), TensorFlow, JupyterNotebook, Next.js, Git, Bash

Other Work & Activities

Purdue Tech Justice Lab, West Lafayette, IN   Aug 2024 – Present
Undergraduate AI Researcher
- Collaborated on interdisciplinary research focusing on the intersection of technology, law, and social justice, analyzing the impact of digital systems on marginalized communities.
- Conducted literature reviews and synthesized findings on topics related to data privacy, algorithmic bias, and cybersecurity ethics, contributing to team publications and presentations.
- Engaged with external stakeholders such as advocacy groups and policymakers in the Greater Lafayette area, translating complex technical findings into actionable insights and supporting equitable tech policy development.

Freelance Software Engineer, Dallas, TX   Sept 2022 – Jan 2023
- Pioneered the use of the Replit Bounties program, gaining hands-on professional experience in real-world project development as a self-taught software engineer.
- Developed web applications such as e-commerce platforms, internal search tools, farm management tools, and project management dashboards using Java, Node.js, Spring Boot, Python, Golang, React, Angular, and PostgreSQL streamlining client operations and improving business processes for users.
- Integrated cross-platform solutions to solve complex problems across diverse tech stacks, decreasing delivery time and project versatility.