

EDUCATION

<b>New York University</b> <i>Master of Science in Computer Engineering</i>	New York, US Sept 2024 — Expected Dec 2025
<b>Silicon Institute of Technology</b> <i>Bachelor of Technology in Computer Science &amp; Engineering</i>	Bhubaneswar, IN July 2019 — May 2023

EXPERIENCE

<b>h011yw00d</b> <b>AI Research Engineer Intern</b> <ul style="list-style-type: none"><li>Working on decoupling the video generative AI engine from Scripted's AVB stack, implementing custom distributed computing, building deploying and maintaining the production app systems.</li><li>Built a social-media app as a Worldcoin mini app in Next.js. Won the world builder residency in Edge Esmeralda.</li><li>Implemented automated video generation job queue management systems using Redis. Tracked User engagement and performance in Postgres, and deployed the app in Vercel.</li></ul>	San Francisco, US May 2025 — July 2025
<b>RadiusAI</b> <i>Software Engineer</i> <ul style="list-style-type: none"><li>Designed a Rust/Kafka health monitoring service handling 5000 requests/10s with improved Python-to-Rust perf.</li><li>Led Rust optimization of cart simulator with parallel processing and faster checkouts.</li><li>Automated DB operations using AWS Lambda/Prefect with 99% data consistency across distributed systems.</li><li>Developed a native GUI application in Rust that highlights unknown objects during checkout in LCD counter-top POS systems, improving store security.</li><li>Created a real-time analytics dashboard using Gradio to visualize annotation data, reducing labeling inaccuracies by more than 30% and improving model training.</li></ul>	Seattle, US Jan 2024 — Aug 2024
<b>StackIt (Superjoin)</b> <b>Founding Engineer</b> <ul style="list-style-type: none"><li>Architected and implemented a resilient microservices ecosystem using Docker, Kubernetes, and GitHub Actions, ensuring 99.9% uptime while integrating Chargebee, Hubspot, and Google Ads to increase user acquisition.</li><li>Engineered an interactive Data-Preview component in React with advanced filtering, joins, and lookup capabilities, improving data visualization by 40% and reducing import errors.</li><li>Structured sustainable RAG pipelines using Python, LangChain, and LlamaIndex for natural language to SQL/NoSQL conversion, reducing user churn and improving query accuracy to 90%.</li></ul>	Bengaluru, IN June 2023 — Dec 2023

TECHNICAL SKILLS

<b>Systems Engineering</b>	Rust, C/C++ (Systems Programming), Parallel/Distributed Computing
<b>Web &amp; Cloud Technologies</b>	TypeScript/Node.js, React/Next.js, AWS, Docker, Kubernetes, Kafka, MongoDB, PostgreSQL
<b>AI/ML Integration</b>	RAG Pipelines, LangChain, LlamaIndex, Vector Embeddings, Python (Data Processing)

PROJECTS

<b>Docking Compilers</b> -	C++, Rust, RISC-V
<b>Ferry</b> - A high-performant, optimised <u>minimal C lang compiler</u> for RISC-V written in Rust, & <b>Yatch</b> - a five-stage, hazard & memory-safe, 32-bit pipelined machine code interpreter for RISC-V with a built-in binary <u>decoder</u> . → <b>Demo</b>	
<b>LIND - Research</b> / Open Source Contribution -	Rust, WASM
A single-process sandbox to securely isolate program execution with fine-grained resource control to prevent system failures	
<b>DOUGH</b> -	Rust, Bash
A high-performance CLI tool for rendering markdown presentations in the terminal with custom syntax highlighting → <b>Demo</b>	
<b>BEE</b> -	Python, BitTorrent
A BitTorrent client with an item-based collaborative <u>recommendation system</u> and a <u>rating prediction system</u> with 95% acc	
<b>RESOC</b> -	React, Firebase
A college resource-sharing platform with taskboard & community chat, 200+ active users within the first 3 months. <b>Live°</b>	
<b>Fireside</b> -	GunJS, Svelte, Rust, Firebase
A decentralized chat app enabling low-latency, secure, and ephemeral messaging with more than <u>20k active users</u> . <b>Live°</b>	

VOLUNTEER EXPERIENCE

Member, Google Developer Student club (GDSC), New York University, Tandon. 2024—2025
Member Secure Systems Lab, New York University, SSL, NYU Tandon. 2024—2025
Chairperson (2022—23) & Joint secretary (2021—2022) of the <u>IEEE Students' Chapter</u> , Silicon Institute of Technology.