

Neal N. Shah

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Objective

Seeking a software, systems, or embedded engineering internship for Summer 2027. Currently a sophomore Computer Engineering student interested in demoscene-inspired systems work, pushing constrained hardware and software runtimes beyond conventional limits. Experienced in Unix-like development, embedded hardware, and open-source projects. Skilled in full stack and AWS backend development including RDS and DynamoDB as well as ECS.

Education

Georgia Institute of Technology | Atlanta, GA

Bachelor of Science in Electrical Engineering, GPA 2.7

August 2025 – Present

Expected Graduation, May 2029

Virginia Tech | Blacksburg, VA

Transfer with 3 Credit Hours

May 25th 2026– Present

Summer courses. Supplementary

Skills

Programming: Java, Python, C, C#, JavaScript, SQL (ANSI, SQLite, MySQL), Rust, Node.js

Platforms: Linux (Ubuntu, Debian, Arch Linux), J2ME, BBOS 5-7, Sony Ericson specific APIs

Hardware: Raspberry Pi, Arduino Uno, Xilinx FPGAs, USRP SDRs (B210, LimeSDR Mini)

Software: GitHub, Netbeans, Eclipse, VSCode, Kdevelop, QT Creator, Blackberry JDE

Communication: Design proposals, technical reports, instruction manuals, presentations (large and small audiences)

Languages: English (fluent), Gujarati (fluent), Hindi (conversational)

Experience

Puter Inc. | Vancouver, British Columbia, Canada

May – August 2016

Software Architect

Designed backend software running on top of AWS ECS, DynamoDB, RDS, and Cloudflare Workers for executing user provided backend code safely.

- Created an execution environment for user provided code to run safely sandboxed on our backend, with over 3000 user deployed applets now.
- Client application has over 1.3 million registered users.

Projects

RCM – Rural Connectivity Module | Radford University and Personal

February 2020

Lead

Created a LimeSDR mini based GSM BTS utilizing OpenBTS with osmo-trx and Ubuntu 16.04

- Created a demo project to allow connectivity with a satellite uplink to blanket an area with cellular connectivity for emergency coverage during a storm or substitute traditional telecom networks in Rural Areas.
- Was a part of the Roanoke Mini Maker Faire at <https://roanoke.makerfaire.com/maker/entry/76/>

AnuraOS – Web based operating environment | Mercury Workshop and Personal

October 2021

Lead

Demo project written in Javascript, HTML, Rust, C, and Bash with separate subsystems to show browser capabilities, powered by service workers to tie everything together.

- Could run i386 Linux GUI binary applications fully in the browser with TCP networking, while also having its own native application format.
- Had 18.7k users at peak.

Relevant Coursework

CS1331- Introduction to Object Oriented Programming: Java 11; JavaFX, Object Oriented Essentials

Leadership or Activities

Mercury Workshop | Founder and Lead

October 2021– Present

- Group of Middle and Highschool (now partially college) students interested in software development
- Found news breaking vulnerabilities in the ChromeOS bootloader (sh1mmer)
- Actively Maintained 20+ opensource projects, including many hit projects such as a web port of celeste