

Ohm Patel

Raleigh, NC | 919-344-8994 | opatel2@ncsu.edu | [linkedin.com/in/ohmptl](https://www.linkedin.com/in/ohmptl) | ohmptl.com

EDUCATION

North Carolina State University

Bachelor of Science in Computer Engineering - 4.0 GPA; Dean's List

Expected May 2027

Raleigh, NC

SKILLS

Languages: Python, C, JavaScript, Assembly, C++, MATLAB, SQL.

Technical Skills: MS Office, Git, VS Code, React, AWS, Agile Development, Embedded Systems.

Soft Skills: Problem Solver, Detail Oriented, Quick Learner, Team Player, Good Communicator, Passionate.

RELEVANT COURSEWORK

Fundamentals of Logic Design

North Carolina State University

Raleigh, NC

- Designed and optimized combinational and sequential circuits using Boolean algebra, Karnaugh maps, flip-flops, finite state machines, and Verilog HDL.
- Developed datapath architectures, memory hierarchies, and cache systems for digital hardware design.
- Utilized CAD tools for simulation, logic synthesis, state assignment, and technology mapping to create efficient and scalable hardware solutions.

Computer Systems Programming

North Carolina State University

Raleigh, NC

- Programmed in C with a focus on memory management, data structures (arrays, linked lists, trees, and hash tables), and system-level programming.
- Translated high-level C code into assembly language to understand low-level machine operations and optimization.
- Gained foundational skills in data abstraction and algorithm design for efficient problem-solving.

EXPERIENCE

Peer Tutor

North Carolina State University

Aug 2023 – Present

Raleigh, NC

- Facilitated tutoring in C programming, circuits, calculus (I-III), and physics, clarifying concepts collaboratively improving grades by an average of 12%.
- Developed study plans and learning strategies, enhancing student comprehension and retention.
- Provided targeted feedback on problem-solving and exam strategies, improving academic performance.

Computer Repair Volunteer

Kramden Institute

Aug 2022 – Aug 2023

Durham, NC

- Refurbished and repaired computer components.
- Efficiently triaged and onboarded computers with operating systems, ensuring optimal functionality for end users.
- Collaborated with a diverse team of volunteers to troubleshoot and resolve challenging technical issues.

PROJECTS

Productify | Python, Node.js, JavaScript, SQL, Git

May 2024 – Aug 2024

- Collaborated on developing Productify, a full-stack tool to enhance productivity and balance for college students.
- Built a scalable back end with SQL, Python, and Node.js to manage user accounts and productivity tools.
- Utilized Git for version control, with plans to integrate generative AI for personalized user experiences.

Raspberry Pi Personal VPN | Raspberry Pi, WireGuard, Linux, IP routing

Aug 2024 – Present

- Configured a personal VPN on Raspberry Pi using OpenVPN for secure, remote access to home network infrastructure.
- Built and customized IP routing, firewall rules, and encryption protocols to ensure safe and reliable data transmission across multiple devices.
- Enhanced network security and accessibility, enabling seamless remote work and private browsing connection.