

YOSHWAN PATHIPATI

Blacksburg | +1 (916) 690-1947 | yoshwanpathipati@vt.edu | [linkedin.com/in/yoshwan-pathipati-b9b525269](https://www.linkedin.com/in/yoshwan-pathipati-b9b525269) | github.com/YoshwanPathipati

EDUCATION

Virginia Polytechnic Institute and State University (Virginia Tech)

Aug 2023 - May 2027

Bachelor of Science, Computer Science Minors: AI, Cybersecurity, and Math (GPA: 3.42 / 4.00)

Blacksburg, VA

• **Achievements:** Dean's List (Top 20% of class)

• **Coursework:** Machine Learning, Computer Systems, Data Structures and Algorithms, Intro to AI, Cloud Software Development, Cryptography, Combinatorics

TECHNICAL SKILLS

• **Programming Languages:** Python, Java, C, JavaScript, HTML, CSS, SQL

• **Frameworks & Libraries:** React, Node.js, NIST Frameworks, CMMC

• **Databases:** MySQL, MongoDB, PostgreSQL

• **Developer Tools:** AWS, Azure, Git, GitHub, Docker, Linux, Windows, Nessus, Wireshark, Infrastructure as Code, Terraform, VS Code, VMware, nmap, CI/CD, Ollama

• **Certifications:** AWS Certified Solutions Architect, Risk Management Framework for Systems and Organization, ChatGPT Prompt Engineering for Developers, Security Awareness Best Practices, DCA - Diploma in Computer Applications

RELEVANT EXPERIENCE

Triple Point Security | Cybersecurity Intern

May 2026 - Present

- Diagnosed and resolved a compliance framework mismatch across 4 cross-referenced NIST/CMMC source documents before a 4-person team began a Security Hub compliance mapping deliverable, preventing the team from rebuilding the mapping under an incorrect control structure.
- Deployed and troubleshot OpenVAS via Docker after diagnosing a stalled feed-sync process, bypassing an unresponsive web UI by issuing scan commands directly through the GMP protocol via CLI, completing the vulnerability assessment on a 5-host lab environment on schedule.
- Performed authenticated and unauthenticated vulnerability scans across 5 hosts using Nessus, identifying 20+ critical and 84 high-severity findings, and validated results using Wireshark packet capture analysis.
- Architected a multi-cloud hybrid network connecting AWS and Azure via VPC/VNet peering and a site-to-site VPN, resolving a cross-provider IKE policy mismatch to establish full tunnel connectivity, and automated infrastructure deployment using Terraform.

Hume Center National Security Institute + Aerospace and Ocean | Undergraduate Research Assistant - SpaceNet Testbed

Sep 2025 - Present

- Designed and deployed Flask REST APIs enabling 5+ aerospace researchers to configure satellite simulations, launch experiments, and monitor real-time telemetry across 2 concurrent experiment workflows.
- Architected React-based frontend with pnpm workspaces, building 4 interactive dashboards for experiment configuration and live satellite telemetry visualization used by 10+ research team members.
- Automated CI/CD pipeline with Docker + GitHub Actions, reducing deployment time from 45 minutes to 8 minutes and ensuring reproducible builds across development and production environments

Virginia Tech Dept. of Computer Science | Undergraduate Research Assistant

Jun 2025 - Aug 2025

- Collaborated with faculty and contributors to build Ruby on Rails backend features for the OpenDSA platform, enabling interactive learning modules and smoother student-instructor workflows for CS 3114, which enhanced student engagement with the course material
- Refactored 3 instructor-facing Rails controllers, reducing database query time by 30% and eliminating N+1 queries across course analytics and student progress tracking modules.

Avenues IIT Bombay | Python Developer Intern

Jul 2024 - Oct 2024

- Developed backend features using Django ORM and MySQL, implementing user authentication, profile management, and data validation across three core modules, which enabled reliable user access and consistent data handling throughout the application
- Performed API endpoint testing with Postman and Django REST framework test client, validated request and response payloads, and identified six critical bugs in the authentication flow across two sprint iterations, which were fixed to improve authentication reliability

Merit Software Technologies. | Software Intern

Jan 2023 - Mar 2023

- Executed manual testing and debugging of C-based backend features using VS Code and Docker, reproduced 12 edge-case bugs, and validated fixes across three development cycles, helping maintain system stability
- Created detailed bug reports with stack traces and reproduction steps, reducing average bug resolution time from 4 days to 2.5 days by improving developer-QA handoff documentation.

PROJECTS

Organic Farm E-Commerce Platform - Built for family agricultural business | Personal Project

Oct 2025 - Present

- Building a full-stack e-commerce web application using React, Node.js, Express, and MongoDB to digitize a family agricultural business, targeting 50+ weekly customers with features for product browsing and order management.
- Implementing Stripe payment integration and real-time inventory tracking system to manage 100+ organic produce SKUs, replacing manual spreadsheet-based order processing.
- Developing mobile-responsive UI with React hooks and CSS Grid, optimizing for 70%+ expected mobile traffic based on farmers market customer demographics.

AI Restaurant Phone Assistant

Feb 2026 - Present

- Built an AI-powered phone agent using Twilio + LLM API that handles restaurant calls, answers FAQs, and takes reservations autonomously
- Engineered a React dashboard for restaurant owners to view call logs, transcripts, and analytics in real time
- Designed a Flask backend with REST API to manage conversation state, business-specific prompts, and call routing logic

UniScheduler - AI Course Scheduling Assistant

Jan 2026 - Apr 2026

- Developing an AI-powered scheduling tool that generates optimized course timetables for 100+ students based on preferences, time constraints, and degree requirements.
- Built backend APIs to process scheduling constraints and dynamically generate conflict-free schedules using heuristic optimization techniques.
- Designed a responsive React frontend enabling real-time schedule visualization, filtering, and user customization of course selections.