

Shival Gupta

+91 7091041542 | sgupta.5545@gmail.com | github.com/shival-gupta | linkedin.com/in/shival-gupta | shivalgupta.me

PROFESSIONAL SUMMARY

CS Graduate specializing in Web, XR, and AI, with hands-on experience building defense simulations, autonomous robots, and agent-driven smart home systems.

TECHNICAL SKILLS

Languages: Java, Python, C, C++, C#, SQL

Web: Next.js, Tailwind CSS, Clerk.js, Prisma ORM, PostgreSQL, WebSockets

AI & Robotics: ROS, Jetson Nano, Arduino, RAG pipelines, multi-agent systems

Tools: Git, Docker, Unity, Blender, OpenXR (VR)

PROJECTS

Autonomous Omni-Wheel Library Robot (Capstone)

Jetson Nano, ROS, Arduino, Python, C++, Docker

Jan 2025 – Apr 2025

[Video]

Integrated Jetson Nano with Arduino for real-time motor control and AI-based navigation.

Implemented ROS-based LiDAR mapping and IR-guided line following for indoor autonomy.

Smart Home Automation (Samsung PRISM Worklet)

Unity, crewAI, WebSockets, Next.js

Sep 2024 – Jun 2025

[Live Demo]

Built a 3D smart home simulation in Unity as a testbed for autonomous AI agents.

Connected AI backend with real-time device orchestration using WebSocket and HTTP.

Developed a control dashboard for monitoring and agent-based interactions.

Samsung Store XR (PRISM Challenge Winner)

Unity, OpenXR, Blender

Feb 2024 – Jul 2024

[Demo Video]

Developed a VR prototype of Samsung's retail store for Meta Quest and other XR devices.

Implemented teleportation, interactive product showcases, and virtual cart systems.

EXPERIENCE

Systems Engineer (ILP Trainee)

Tata Consultancy Services (TCS)

Jan 2026 – Present

XR Developer Intern

SatoriXR, Chennai, India

Feb 2025 – Jun 2025

Certificate

Led a cross-functional team of developers and 3D artist on a defense-focused VR simulation.

Processed DEMs and satellite imagery into interactive Unity-based terrain systems.

Implemented missile trajectory modeling and Google Earth-style visualization tools.

Assisted in hosting OpenProject (open-source Jira alternative) on Azure using Docker.

Software Developer Intern

Airtel Payments Bank, New Delhi

Sep 2023 – Nov 2023

Certificate

Worked in Agile/Scrum workflows for fintech application development.

Built a secure full-stack B2B SaaS prototype for enterprise transactions.

Implemented Next.js, Prisma, and PostgreSQL with encryption and RBAC.

Integrated third-party authentication and modern UI using Tailwind and shadcn.

EDUCATION

B.Tech in Computer Science and Engineering (AI & Robotics)

Vellore Institute of Technology, Chennai

2021 – 2025

CGPA: 7.84

Senior Secondary (CBSE XII)

St. Karen's High School, Patna

2020

62.17%

Secondary (CBSE X)

St. Karen's High School, Patna

2018

75.67%

EXTRACURRICULAR ACTIVITIES

Piano, Skating, Badminton, Photography, Videography