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)   Jan 2025 – Apr 2025
Jetson Nano, ROS, Arduino, Python, C++
- 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)   Sep 2024 – Jun 2025
Unity, crewAI, WebSockets, Next.js   *Certificate*
- 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)   Feb 2024 – Jul 2024
Unity, OpenXR, Blender   *Certificate*
- 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)   Jan 2026 – Present
Tata Consultancy Services (TCS)

XR Developer Intern   Feb 2025 – Jun 2025
SatoriXR, Chennai, India   *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   Sep 2023 – Nov 2023
Airtel Payments Bank, New Delhi   *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)   2021 – 2025
Vellore Institute of Technology, Chennai   *CGPA: 7.84*

Senior Secondary (CBSE XII)   2020
St. Karen's High School, Patna   *62.17%*

Secondary (CBSE X)   2018
St. Karen's High School, Patna   *75.67%*

EXTRACURRICULAR ACTIVITIES

Piano, Skating, Badminton, Photography, Videography