Shivam Kumar Jha

2004skj@gmail.com — +91-8800603512 — New Delhi, India — LinkedIn — GitHub

---

PROFESSIONAL EXPERIENCE

Automation Engineering Intern — **Lam Research** — Bangalore, India   Jun 2025 – Present
- Architected 15 enterprise automation solutions using Python, SAP ABAP, JavaScript, and C# across Proto4lab, Pilot MPM, CPE, GSCM, and CEM departments, eliminating 2000+ hours of manual work annually
- Engineered ZERF Data Automation System integrating SAP GUI Scripting with Python win32com, transforming 3-hour daily workflows into 15-minute streamlined processes while processing 500+ transactions at 99.9% accuracy
- Built Power BI analytics dashboard processing 10,000+ weekly data points for Project Gold Mine, improving NPI Supply Chain visibility by 70% through real-time SAP data extraction and automated reporting
- Created Chrome extension using JavaScript for automatic BOM extraction and engineering drawing management, reducing download time by 60% and standardizing workflows across 50+ engineers

UAV Engineering Intern — **NDRF 8th Battalion** — Uttar Pradesh, India   Jan 2025 – Mar 2025
- Designed "Rakshak" autonomous drone achieving 80% obstacle avoidance accuracy using PixHawk and Raspberry Pi
- Deployed ADAS modules for real-time aerial assessment supporting 30+ million disaster-affected population

Backend & AI Engineering Intern — **National Informatics Center** — Delhi, India   Jul 2024 – Sep 2024
- Constructed AI authentication system using YOLOv8 and Vision Transformer for National Awards Portal (300,000+ users)
- Achieved 89% model accuracy through iterative A/B testing and production deployment optimization

---

RESEARCH PROJECTS

LostInEffect - Quantum-Resistant Cryptography — Python, TensorFlow, Delithium   GitHub
- Pioneering novel quantum-resistant technology leveraging chaos theory and butterfly effect algorithms, achieving computational irreversibility against quantum threats (research paper in submission)

BEYOND GENERATION - Hyperspectral Anomaly Detection — PyTorch, LRSR, EBT   GitHub
- Introduced first-ever integration of Energy-Based Transformers with Low-Rank Sparse Representation for AI Grand Challenge, processing 30km satellite imagery with top-tier PR-AUC scores (research paper in progress)

INDUSTRIAL PROJECTS

CatalogCraft - National Champion, Build for Bharat — Kotlin, React, Django, PostgreSQL   GitHub
- Won National Championship at Google-Antler-Paytm-ONDC hackathon by digitizing 1000+ SKUs in 17 languages, improving search accuracy by 35% through OCR, voice recognition, and YOLO object detection

4-DOF Robotic System - Lam Research Challenge Finalist — C++, ROS, ESP32   GitHub
- Selected among top 25 teams nationally for Lam Research Challenge 2024, designed precision temperature control achieving ±1.0°C accuracy with PID-controlled Peltier cooling (project led directly to internship offer)

Amazon ML Challenge 2024 — XGBoost, BLIP, CLIP, Transformers   GitHub
- Benchmarked 4 state-of-the-art models achieving 90% multimodal accuracy in 72-hour intensive learning sprint

---

TECHNICAL SKILLS

- **Languages:** Python, JavaScript, Java, C++, C#, TypeScript, SQL, Rust, Kotlin, Solidity, R, PHP
- **Frameworks:** React, Django, Node.js, FastAPI, Flask, Express.js, Next.js, Flutter, Laravel, TensorFlow, PyTorch
- **Cloud/DevOps:** AWS, Azure, GCP, Docker, Kubernetes, Jenkins, GitHub Actions, CI/CD, Vercel, Firebase
- **Data/AI:** pandas, NumPy, scikit-learn, OpenCV, Keras, Power BI, Tableau, SAP ABAP, Selenium
- **Databases:** PostgreSQL, MongoDB, MySQL, Redis, Supabase, SQLite, MariaDB

EDUCATION

Bachelor of Technology in Computer Science   Expected May 2026
Maharaja Agrasen Institute of Technology, New Delhi
Kendriya Vidyalaya R.K. Puram, New Delhi — Mathematics Olympiad (2x), Science Olympiad Winner   2010 – 2022

LEADERSHIP & ACHIEVEMENTS

- Led teams to finals in 60+ hackathons as Technical Lead, demonstrating consistent innovation and strategic execution
- Founded BYTE Tech Society (100+ members), organizing 10+ workshops and mentoring 200+ students in emerging tech
- BYTE Tech Society President, T-Hub National Hackathon Finalist, Lam Research Challenge 2024 Finalist, Open-source contributor