

SUJENDRA G BHARADWAJ

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PROFILE SUMMARY, AWARDS AND RECOGNITIONS

Master's student in Computer Science at USC and recipient of the Extra Miler Award for backend performance and testing excellence, with 2 years of experience in software development, automation, and server architecture. Skilled in Python, Django, Go, gRPC, Docker, AWS, and database applications (MySQL, MongoDB, Redis)

EDUCATION

University of Southern California

Master of Science in Computer Science (3.5 GPA/ 4.00 GPA)

Los Angeles, California

August 2025-May 2027

- Developing expertise in Advanced algorithm design, Data Structures, Quantum Computing , AI/ ML, Algorithm Development, Mobile Development, Database Management, Query Processing and Optimization, Automated Reasoning, Operating Systems

SJB Institute of Technology

Bachelors' in Electronics and Communication Engineering (3.56 GPA/4.00 GPA)

Bengaluru, Karnataka

August 2019-May 2023

- Focus on - C, Python Programming, Data Structures and Algorithms, VLSI, Embedded C, Computer Networks, System Design

EXPERIENCE

Wakefit Innovations Limited

Software Engineer

Bengaluru, Karnataka

June 2023-July 2025

- Built backend systems using **Django and Go-based gRPC microservices**, containerized with **Docker**, leveraging **Redis and MySQL/ MongoDB** to **reduce query latency by 40%** and **improve backend throughput by 18%**. Optimized and validated **RESTful APIs** with 100% endpoint coverage using **Postman and Swagger**, and used **Git/Bitbucket** for **version control**
- Automated UI and API testing with **Python, Selenium, and Playwright** and conducted load, performance, and security testing with **Grafana k6 (TypeScript)**, including vulnerability assessment, reducing regression defects by 35% and improving data integrity by 30%
- Managed **AWS deployments** and implemented **CI/CD pipelines using Jenkins**, worked with **AWS S3** for ~1TB daily data, and utilized **AWS ECS** for containerized application management. Collaborated with frontend and DevOps teams throughout the **SDLC in Agile sprints** via **Jira and Bitbucket**, delivering 12+ features on time

Ethnotech Academic Solutions

Network Design Intern

Bengaluru, Karnataka

October 2022-December 2022

- Engineered and managed company **network development** via Cisco Packet Tracer, performing network administration with 15+ IPs, 200+ packet traces, and 100+ ping tests, increasing reliability by 11% and strengthening architecture and security

ACADEMIC PROJECTS

Humanoid Robot on Military Applications

Project Lead

Bengaluru, Karnataka

January 2023-May 2023

- Led design of a humanoid military robot, integrating 5+ hardware modules and Python-based **PyAudio** speech recognition with **Artificial Intelligence and Machine Learning** to process 4+ commands, improving motion accuracy by 5%. Published research: [Humanoid Robot for Military Applications](#)

Hyperspectral Image Compression using JPEG Algorithm

Project Lead

Bengaluru, Karnataka

January 2022-May 2022

- Led development of a Python-based Hyperspectral Image Compression algorithm using **OpenCV** for image processing and **pattern recognition and design patterns**; enhanced JPEG compression with Huffman coding and zigzag scanning, achieving ~4% faster compression and ~2% higher fidelity. Published research: [Hyperspectral Image Compression using JPEG Algorithm](#)

Independent Projects

- Developed and deployed projects—including a portfolio site, login page, and e-commerce dashboard—using HTML, CSS, JavaScript, Django, MySQL, Next.js and react.js showcase full-stack web development and UI/UX skills. Projects hosted on [GitHub](#)

SKILLS

- Programming Languages, Frameworks and Databases: Python, Java, C++, Node.js, Go, Django, React.js, Next.js, Angular, Selenium, Playwright, Pytest, gRPC, JSON, HTML, CSS, Javascript, MySQL, PostgreSQL, MongoDB, Redis, NoSQL, Data Warehousing
- AI/ML & Data Science: NLP, Scikit-learn, PySpark, PyTorch, PowerBI, MapReduce, Linear Regression, Statistics, Data Mining, Data Analytics, Big Data, PyAudio, OpenCV, Data Modeling
- Computer Science Fundamentals – OOP & Software Design, Software Engineering, Code Review, Troubleshooting, Debugging
- Distributed System, Networking, Linux/Unix - TCP/IP, DNS, SSH, SSL, Concurrency, IoT, System Performance Optimization, Networking Protocols, Embedded Systems, Distributed Systems, Multithreading, Client-server architecture, Apache Kafka, AWS Lambda, ElasticSearch
- Cloud & DevOps – AWS, Docker, Kubernetes, Jenkins, Git/GitHub/Bitbucket, Oracle NetSui, Workflow orchestration, Cloud Computing, Virtualization concepts, Container Technologies, R&D Cloud, Salesforce, CRM