

Pradhyuman Yadav

52 Skytop St, San Jose, CA, United States of America,
95134 | pradhyuman.yadav@gmail.com | 5712594892 | github.com/pradhyuman-yadav
linkedin.com/in/pradhyuman-yadav/

EDUCATION

The George Washington University, School of Engineering & Applied Science
Master of Science in Computer Science

Washington, DC
May 2025

- GPA : 3.8 / 4.0.
- Ensured smooth operation of the GW Gym by maintaining equipment, addressing member inquiries, and upholding a safe, organized environment.

Manipal Academy of Higher Education
Bachelors of Technology

India
May 2022

- Led two technical organizations: Grew the Manipal Information Security Team by 30% via 12 workshops and 4 campus-wide campaigns; as President, directed a 50-member software org to host coding bootcamps (React, Agile) and deliver 10+ open-source projects with 3 global partners, cutting workflows by 15%.

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, JavaScript (ES6+), TypeScript, Go, Node.js, C++, MongoDB, Redis, SQLite, ORM (Hibernate, Sequelize), React.js, Angular.js, Next.js, Web Performance Optimization.
- **System Design & Architecture:** Microservices, Distributed Systems, REST/GraphQL APIs, Event-Driven Architecture (Apache Kafka), Design Patterns (Factory, Singleton, Observer), Scalability, Load Balancing.
- **Backend Development:** Spring Boot, Django, Flask, Quarkus, SQL/NoSQL Optimization, PostgreSQL, MySQL.
- **DevOps & Cloud:** Kubernetes, Docker, Terraform, AWS (ECS, S3, Lambda, RDS), GCP, CI/CD (Jenkins, GitHub Actions).
- **Tools & Utilities:** Git, Linux/Shell Scripting, Agile/Scrum, TDD/BDD, Concurrency (Multithreading, Async Programming), Security Best Practices (OWASP), Unit/Integration Testing (JUnit, Mockito), E2E Testing (Cypress, Selenium), Real-Time Systems, Machine Learning Pipelines, Low-Latency Systems.

WORK EXPERIENCE

CodeAdvantage
Coding Instructor

Washington, DC
January 2025 - Present

- Introduced 150+ elementary students (Grades 1–5) to foundational programming (Python, Scratch) and computational thinking through gamified lessons and project-based activities, fostering early problem-solving skills and creativity.

Optum
Software Engineer

India
July 2022 - August 2023

- Spearheaded design and development of a micro services architecture for a high-performance streaming data application, increasing data throughput by 35% and reliability by 25%.
- Collaborated with cross-functional teams to implement scalable APIs using Spring Boot and Quarkus frameworks, enhancing system's ability to handle 50% more concurrent users and cutting down server response times by 20%.
- Delivered a high-availability solution for data visualization using Flask, React, PostgreSQL, and Docker, minimizing down analysis time by 50% for over 100,000 users.

INTERNSHIP EXPERIENCE

Research Center Imarat
Software Engineer Intern

India
January 2022 - May 2022

- Initiated development of a Windows Server and Client application leveraging Python and Socket Programming, increasing data processing efficiency by 25% and decreasing processing time from 4 to 3 hours, boosting system uptime by 15%.

TECHNICAL PROJECTS

- **Personal Website:** Designed and deployed a responsive portfolio (available at thepk.in) deploying Next.js and Tailwind CSS, achieving 99.9% uptime via Docker containerization and Jenkins-driven CI/CD pipelines; optimized deployment workflows to reduce build time by 40%. (Skills: Next.js, Tailwind CSS, Docker, Jenkins, CI/CD, Linux server administration, Nginx, SSL/TLS).
- **JobMatch Automator:** Automated job data collection from 5+ boards using Python/Selenium, achieving 85% matching accuracy and 20% cost reduction via microservices, cron jobs, and LLM integration; accelerated application process by 80% leveraging Discord webhooks. (Skills: Python, Selenium, Google Cloud, SQLite, REST APIs, cron, Docker, LLMs/GPT, webhooks).
- **Trading with ML:** Built ML-driven trading platform with Backtrader and real-time APIs, executing 150+ trades for 20% portfolio growth and 85% trend accuracy by optimizing data pipelines and preprocessing. (Skills: Python, Backtrader, Binance/Yahoo APIs, Pandas, NumPy, ML models, real-time systems).