N H PADMA PRIYA

Software Engineer | Python Backend • Data Engineering • AI Integration • Full Stack

Phone: +91 9632675717
Email: nh.padmapriyaa@gmail.com
GitHub: github.com/PadmaPriyaNH
LinkedIn: linkedin.com/in/nh-padmapriya
Portfolio: nhpadmapriya.netlify.app/

PROFESSIONAL SUMMARY

Engineer who builds production-ready systems delivering measurable business impact. Architected 6+ modular applications using Python/Flask achieving 95% chatbot accuracy (spaCy + Cohere), 30% support load reduction, and insights from 100,000+ Airbnb listings via end-to-end EDA. Ranked #1 among 240+ BCA students (CGPA 9.43/10). Combines backend depth (Flask blueprints, Docker, CI/CD) with data engineering rigor (Power BI, pandas) and framework-agnostic frontend mastery to ship solutions that scale.

TECHNICAL SKILLS

- **Backend:** Python, Flask (Application Factory + Blueprints), REST APIs, JWT, bcrypt, SQLAlchemy, Node.js, Express
- **Data:** Pandas, NumPy, SQL (PostgreSQL, MySQL), Power BI (Published Dashboards), Matplotlib, Seaborn, EDA (100k+ rows)
- **AI/NLP:** spaCy (NER, Intent Classification), Cohere AI (Semantic Search), Fuzzy Matching, Prompt Engineering, RAG
- **Frontend:** JavaScript (ES6+), HTML5, CSS3, Canvas API, Chart.js, Responsive SPA Architecture, Framework-Agnostic
- **DevOps:** Docker, GitHub Actions (CI/CD), Git, pytest (85%+ coverage), Security Hardening (XSS/SQLi), Linux CLI

TECHNICAL PROJECTS

Lexanova – AI Telegram Assistant | Python, Flask, spaCy, Cohere, Docker   GitHub

- Engineered NLP pipeline using spaCy for named entity recognition + intent classification across 200+ FAQ intents; integrated Cohere semantic search achieving 95% response accuracy with <2s latency
- Unified 15+ external APIs (news/weather/translation) into fault-tolerant Flask backend with retry logic, circuit breaker pattern, and structured logging for production observability
- Containerized with Docker; enabled zero-config onboarding for distributed team collaboration

Airbnb Market Analysis – End-to-End EDA | Python, Pandas, NumPy, Matplotlib, Seaborn, PostgreSQL   GitHub | Live

- Performed comprehensive EDA on 100,000+ Airbnb listings; engineered features (price_total_first_nights, occupancy_rate_proxy) and standardized messy dataset to answer 35+ business questions on pricing dynamics
- Built visualization suite using Matplotlib/Seaborn (histograms with KDE, box plots, correlation heatmaps) with outlier handling (99th percentile clipping) to preserve interpretability
- Optimized PostgreSQL queries for 10x faster aggregation on geographic and temporal dimensions; delivered reproducible Jupyter notebook with pinned dependencies and Colab execution badge

Lunara – Modular E-Commerce Platform | Python, Flask (Blueprints), PostgreSQL, JS   GitHub | Live

- Architected production-ready application using Flask application factory + blueprints pattern (auth/products/payments/chatbot separation); adopted as team template during Edunet Agile sprint
- Reduced support queries 30% (140 → 98 weekly) via sentiment-aware FAQ chatbot using fuzzy matching with escalation logic for negative sentiment detection
- Hardened all endpoints against XSS/SQL injection; implemented bcrypt password hashing with session management

JobScoutPro – Job Market Intelligence | Node.js, Express, Chart.js, Docker, GitHub Actions   GitHub | Live

- Designed provider adapter pattern integrating 5+ job APIs (RemoteOK/Adzuna/GitHub Jobs); normalized heterogeneous schemas into unified analytics-ready format serving 10,000+ listings
- Built interactive Chart.js dashboards visualizing skill demand trends; validated UX with 50+ user testers
- Automated deployment via GitHub Actions CI/CD; reduced release cycles 40% while maintaining 85%+ test coverage

PROFESSIONAL EXPERIENCE

Virtual Software Engineering Intern - Edunet Foundation (AICTE–Vodafone Idea & IBM)   Aug 2025 – Oct 2025

- Built NLP-powered analytics chatbot (spaCy/Pandas) processing 500+ user queries; automated insight generation reduced reporting time 25% for business stakeholders
- Containerized automation tool (Docker) integrating weather/news APIs; ensured environment parity across 4-person distributed Agile team
- Developed responsive Flask frontend with HTML/CSS/JavaScript; practiced Git feature branching and PR reviews

Software Engineering Virtual Experience - JPMorgan Chase & Co. (Forage Platform)   Jun 2025

- Implemented idempotent transaction API endpoints with request validation and error handling patterns
- Achieved 85%+ test coverage using pytest for core modules; practiced TDD workflow on critical path components

EDUCATION

- **Bachelor of Computer Applications (BCA)**   **Apr 2022 – Jul 2025**
  Maharani Cluster University, Bengaluru | **CGPA: 9.43/10** (Ranked #1 among 240+ students across 2 campuses)
- **PGCET 2024 Rank:** 2867 (**Top 10%** statewide for MCA admissions)

CERTIFICATIONS

- **Python for Data Science, AI & Development —** IBM via Coursera, 2024
- **Introduction to Artificial Intelligence (AI) —** IBM via Coursera, 2024
- **Introduction to Software Engineering —** IBM via Coursera, 2024
- **Accelerating End-to-End Data Science Workflows —** NVIDIA Deep Learning Institute, 2024
- **Work Smarter with Generative AI for Professionals —** Planet of Students, 2025

ADDITIONAL

- **Languages: English** (Fluent), **Telugu** (Native), **Kannada** (Fluent), **Tamil** (Conversational), **Hindi** (Basic)
- **Engineering Practices:** Agile/Scrum, Git Workflows, Cross-Functional Collaboration, Production Debugging, Requirements Translation, Architecture Decision Records (ADRs)