

Naman Pal

namanpal333@gmail.com | +91-8979995418 | [LinkedIn](#) | [Github](#) | [Portfolio](#)

Summary

Data-driven professional with expertise in backend engineering, machine learning, and AI. Skilled in Python, SQL, and cloud-based systems, with hands-on experience building scalable ML pipelines and automation frameworks.

Skills

Programming	Python, C++, SQL, JavaScript, HTML, CSS, GitHub
Data Science/ML	Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Keras, Transformers, NLP
Databases	MySQL, PostgreSQL, MongoDB, Redis
Tools/Frameworks	FastAPI, Flask, Selenium, Docker, Celery, Tableau, Power BI, Hadoop, Spark, n8n
Concepts	Machine Learning, Data Analysis, Big Data, APIs, DSA, OOP, Version Control

Work Experience

Backend & ML/AI Engineering Intern ([Link](#)) RYL NeuroAcademy Pvt. Ltd. Jul 2025 – Sep 2025

- Developed and optimized backend APIs using FastAPI, ensuring high performance and scalability.
- Built ML pipelines for emotion analysis and crisis detection using PyTorch and Hugging Face Transformers.
- Implemented asynchronous background tasks with Celery to improve responsiveness.
- Designed and managed PostgreSQL, MongoDB, and Redis solutions for structured, conversational, and caching data.
- Integrated semantic search and therapeutic response generation workflows for personalized experiences.
- Ensured HIPAA/GDPR-compliant system design for secure handling of sensitive user data.
- **Key Tech:** FastAPI, PyTorch, Transformers, Celery, PostgreSQL, MongoDB, Redis, NLP, ML Pipelines

Projects

Energy Demand Forecasting GitHub

- Built ARIMA-based forecasting model to predict future energy demand with strong accuracy.
- Conducted exploratory analysis to capture trends, seasonality, and autocorrelation.
- Visualized forecasts with Matplotlib and Seaborn for interpretability.

Tech Stack: Python, Pandas, NumPy, ARIMA, Matplotlib, Seaborn

E-commerce Automation Testing GitHub

- Developed a Selenium automation framework using the Page Object Model (POM).
- Automated end-to-end flows: login, add-to-cart, checkout, and logout.
- Integrated CI/CD pipelines with GitHub Actions and HTML test reporting.

Tech Stack: Python, Selenium, PyTest, GitHub Actions, HTML Reports

Reddit Persona Generator GitHub

- Scraped Reddit data using API to extract user behavior and activity.
- Applied OpenAI LLM for persona generation with citations and structured output.
- Automated workflows for scalable persona generation with JSON export.

Tech Stack: Python, Reddit API, OpenAI LLM, JSON, Automation

Certifications

Exploratory Data Analysis for Machine Learning
Supervised Machine Learning: Classification and Regression
Data Structures & Algorithms Toolbox
Agile Scrum Training
Software Development Processes
Introduction to Computers & OS Security

Education

Bachelor of Technology in Computer Science Engineering, Bennett University	2022 – 2026
Senior Secondary Education, Delhi Public School (CBSE)	2021 – 2022