



📍 Nainital, India  
🌐 Open to Relocation

☎ +91 70173 26310  
✉ [agpawan13@gmail.com](mailto:agpawan13@gmail.com)

## TECHNICAL SKILLS

- **Generative AI**:  
LangChain, RAG,  
Transformers, Hugging Face,  
Ollama, Multi-Agent Systems

- **ML/DL**:  
Python, PyTorch,  
TensorFlow, Scikit-Learn,  
Feature Engineering, Time  
Series Forecasting

- **NLP**:  
LLM, Text Summarization,  
Ethical Web Scraping (XPath)

- **Data Tools**:  
SQL, Pandas, NumPy, Power  
BI, Matplotlib/Seaborn

- **Cloud/MLOps**:  
Azure (basic)

- **Domain Expertise**:  
Energy Systems, Predictive  
Maintenance

# PAWAN KUMAR AGRAWAL

Sr. Data Scientist & GenAI Engineer  
Business Analytic & Data Analytic  
PhD in Mechanical Engineering + MBA (HRM)

📁 Portfolio  
<https://pawankumaragrawal.github.io/>

🌐 LinkedIn  
<https://www.linkedin.com/in/pawan-kumar-agrawal-82b938229>

📄 GitHub  
<https://github.com/PawanKumarAgrawal>

## SUMMARY

PhD-qualified AI Engineer with **12+ years** in energy systems and **1.5 years** leading GenAI projects, delivering enterprise-grade solutions like anomaly detection and automated reporting. Proven expertise in merging industrial domain knowledge (hydropower operations) with cutting-edge tools (**LangChain, HuggingFace, Ollama, RAG, Transformers, MultiAgent-System**) to solve complex business challenges. Skilled in Python, SQL, and cross-functional leadership, with certifications in Data Science and advanced degrees (PhD Mechanical Engineering + MBA).

## CERTIFICATIONS

- ❖ **General Data Science and SQL**  
<https://www.testdome.com/certificates/6356e54229c440f3a8bdf3fc1887686f>
- ❖ **SQL (Basic)**  
<https://www.hackerrank.com/certificates/iframe/c99cf664ad70>
- ❖ **Python (Programming Language)**  
[https://www.linkedin.com/skill-assessments/Python%20\(Programmings%20Language\)/report/](https://www.linkedin.com/skill-assessments/Python%20(Programmings%20Language)/report/)

## WORK EXPERIENCE

**Sr. Data Scientist & GenAI Engineer** 06 months (continue....)  
August 2024 – Present

**Factobi Private Limited**  
**Bengaluru, India**

**RAG System Design**: Spearheaded the design of Retrieval-Augmented Generation (RAG) systems to solve complex business challenges, integrating transformer-based LLMs (e.g., Hugging Face) for real-world applications.

**Agent-Based AI Innovation**: Drove innovation in agent-based AI platforms by architecting multi-agent systems for scalable, real-time automation workflows, enhancing decision-making efficiency.

## SOFT SKILLS

Analytical Skills

Problem-Solving

Team Management

Team Leadership

Team Motivation

## STRENGTHS:

Hard Worker

Good Learner

Steady & Focused

## LANGUAGES:

English

(Professional)

Hindi

(Native)

**\*\*AI Strategy Leadership\*\***: Led cross-functional teams to define and execute Factobi's AI strategy, focusing on predictive analytics, deep learning models, and ethical AI governance.

**\*\*Advanced NLP Solutions\*\***: Pioneered advanced NLP solutions to automate data extraction and summarization, reducing manual effort by 60% through tools like LangChain and custom XPath-based web scrapers.

**\*\*Data Privacy & Security\*\***: Championed data privacy by deploying private LLMs for secure embedding generation and textual response synthesis, ensuring compliance with global standards.

**\*\*Data Scientist & GenAI Engineer\*\***

**01 years**

**August 2023– July 2024**

**Factobi Private Limited**

**Bengaluru, India**

**\*\*AI Automation Frameworks\*\***: Created AI automation frameworks in Python to improve data transformation and integration for Factobi's product.

**\*\*Log Anomaly Detection\*\***: Developed a model to detect log issues using clustering techniques, improving system reliability.

**\*\*Time Series Forecasting\*\***: Built a time series forecasting model using ML libraries like Scikit Learn, TensorFlow and PyTorch, helping predict demand accurately.

**\*\*PDF Report Automation\*\***: Automated PDF report extraction and summarization, cutting data processing time in half.

**\*\*GenAI Prototypes\*\***: Worked on GenAI prototypes with LangChain and Hugging Face, contributing to AI solutions used in future projects.

**\*\*Junior Engineer (Hydropower Operations)\*\***

**12 years**

**Nov 2004 – Mar 2016**

**UJVN Limited**

**Dehradun, Uttarakhand**

**(A hydro-power generation company of Uttarakhand government)**

**\*\*Operation & Maintenance\*\***: Leveraged analytics, attention to detail, and technical expertise for hydropower stations (up to 240 MW), and reinforcing data-driven decision-making.

**\*\*Data Analysis & Reporting\*\***: Proficient in data analysis, reporting, and financial acumen, reinforcing data analysis skills for daily generation reports and monthly energy accounts.

**\*\*Data Management & Organization\*\***: Developed/maintained comprehensive data bank, showcasing expertise in data management and organization for operational improvements.

**\*\*Strategic Planning & Budgeting\*\***: Contributed to strategic planning/budgeting, combining financial acumen with operational knowledge.

**\*\*Procurement Optimization\*\***: Exhibited effective procurement skills for efficient supply chain operations.

**\*\*Financial Management\*\***: Managed contractor billing with precision, showcasing meticulous financial tracking.

**\*\*Proactive Maintenance\*\***: Conducted preventive & corrective maintenance, demonstrating technical expertise and troubleshooting skills.

**\*\*Leadership & Team Management\*\***: Led/inspired teams, fostering collaboration, communication, and training.

## **\*\*EDUCATION\*\***

---

### **- \*\*PhD in Mechanical Engineering\*\***

G.B. Pant University, Uttarakhand | 2020–2023

- Thesis: Green Polymers & Composites | GPA: 8.27/10.00

### **- \*\*Relevant Coursework\*\***:

Research Methodology, Optimization Techniques , Data Modelling

**\*\*Topped in University Entrance Exam & got University Fellowship for 36 months\*\***.

### **- \*\*MBA (HR & Finance)\*\***

Uttarakhand Technical University | 2016–2018 | 68.7%

### **- \*\*M.Tech. (Mechanical Engineering)\*\***

G.B. Pant University, Uttarakhand | 2002–2004 | GPA: 8.28/10.00

**\*\*Qualified GATE – 2002 with 94.10 percentile & got MHRD scholarship for 24 months\*\***.

### **\*\*B. Tech. (Mechanical Engineering)\*\***

G.B. Pant University, Uttarakhand | 1994–1998 | GPA: 4.061/5.000

