

PRIYANKA RANI

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Management Information Systems graduate with experience in SQL, Python, and Oracle. Skilled in data analysis, pipeline design, and analytics solutions. Built projects like recommendation systems, IoT dashboards, and NLP tools. Proficient in cloud platforms and enterprise databases, with a strong focus on data-driven decision-making.

EDUCATION

University of Maryland, Baltimore County, MS in Management Information Systems | Maryland, USA May 2025
GPA: 3.9 / 4.0
Godutai engineering College For Womens, B.Tech in Electronics and Communication Engineering |
Kalaburagi, India GPA: 9.17 / 10 Aug 2021

RELEVANT COURSEWORK

Data Mining | Database Systems | Machine Learning | Data Visualization | NLP | AI Ethics | Cybersecurity

EXPERIENCE

Research Assistant, University of Maryland, Baltimore County | USA May 2024 - Present

- Designed 10+ AI-powered caselets by analyzing peer-reviewed papers, streamlining instructional content development by 40%.
- Engineered prompt-based content generation using Python and OpenAI/Hugging Face APIs, reducing manual content creation time by 60%.
- Optimized chatbot performance through 15+ zero-shot and few-shot prompt designs, improving response accuracy by 25%.
- Deployed applications on AWS with 99.9% uptime, ensuring reliable access for academic users.

Graduate Assistant, University of Maryland, Baltimore County | USA Feb 2024 - May 2024

- Structured 50K+ data points for LLM fine-tuning, improving training efficiency by 30%.
- Used Wispher to automate transcription, cutting manual processing time by 45%.

Data Analyst (Data & IoT Systems), GTTC | (Kalaburagi, India) Aug 2021 - March 2023

- Collected and analyzed time-series sensor data from PLC-based systems to identify equipment anomalies and optimize industrial workflows.
- Created real-time monitoring dashboards that ingested data from 50+ IoT sensors, improving fault detection response by 20%.
- Contributed to predictive maintenance efforts by preparing datasets for anomaly detection models using Python and SCADA logs.

SKILLS

Programming Languages	Python, Java, SQL, PLSQL, C, C++, Assembly
Data & Analytics Tools	Excel, Tableau, Power BI, MATLAB, Oracle, IT Infrastructure, Data Pipelines
Cloud & Platforms	AWS, Oracle Cloud
AI-ML Frameworks & Libraries	OpenAI API, Hugging Face Transformers, TensorFlow, PyTorch, CRF, SAQUET, WEKA
Prompt Engineering	Few-shot prompting, Context management, Temperature tuning, LLM fine-tuning
Core Skills	Data Analysis, Data Visualization, Business Intelligence, Market Research, Cloud Solutions
CRM & Productivity Tools	Microsoft Office Suite, Collaboration Platforms (Teams, Slack, etc.)

PROJECTS

Music Recommendation System – Streamlit, ML, Cosine Similarity Apr 2025 - May 2025

- Built a web-based music recommender using Streamlit.
- Implemented content-based filtering and ML models (e.g., cosine similarity) to personalize recommendations with >87% match accuracy based on user preferences.

Named Entity Recognition (NER) - Using Google Colab March 2024 - May 2024

- Developed a custom Named Entity Recognition model using Conditional Random Fields (CRF), achieving F1-score of 0.84 on a labeled dataset.
- Preprocessed and tokenized over 10,000 text samples, enhancing model precision and reducing noise.

Generative AI-Powered Question Evaluation (Python, SAQUET) Feb 2021 - May 2021

- Evaluated AI-generated questions using the SAQUET toolkit, analyzing over 1,500 questions for quality metrics.
- Applied Transformer-based models (BERT variants) to validate semantic integrity, increasing accuracy by 23%.