

PRAVEEN KUMAR PONNUGUPATI

qyj25002@uconn.edu | +1 (860) 209-9025 | [Portfolio](#) | [LinkedIn](#) | [GitHub](#)

EDUCATION

University of Connecticut | Hartford, Connecticut Aug 2025 – May 2027
Master of Science, Business Analytics and Project Management — Concentration: AI & Machine Learning
• Coursework: Artificial Intelligence, Predictive Modeling, Deep Learning, Data Mining

Bharath Institute of Higher Education and Research | Chennai, India Jul 2018 – May 2021
Bachelor of Technology, Aerospace Engineering

PROFESSIONAL EXPERIENCE

Data Scientist - Information Technology Services, UConn | Storrs, Connecticut Dec 2025 – Present
• Analyzed UConn student performance data to identify behavioral patterns that most reliably predict academic risk, translating findings into clear decision signals that the student services team could act on.
• Built automated data pipelines (Azure Data Factory) to continuously standardize and prepare incoming student records, reducing manual preparation work and ensuring advisors act on trustworthy data.
• Developed dashboards in Power BI and training materials for faculty and staff to interpret student risk signals and act on them directly.
• Tested multiple predictive models across student datasets to find one that handled class imbalance, worked with limited data, and was explainable enough for advisors to trust.

Technical Lead - Cognizant Technology Solutions (Travelers Insurance) | Chennai, India Jan 2022 – Jul 2025
• Kept production systems running on Red Hat and AWS for Travelers' insurance applications by managing incidents, patching servers, and preventing outages before they hit customers.
• Leveraged data from system logs, performance metrics, and incident reports to predict service outages using statistical models and data visualization.
• Cut production incidents by ~8% through root cause analysis and Puppet-based preventive automation.
• Improved deployment reliability by implementing Git/GitLab CI/CD pipelines that automated testing and reduced manual release errors.
• Automated server provisioning and configuration with Terraform and Python, so the team could spin up environments in minutes instead of hours.

PROJECTS

Student Exam Performance Prediction
• Predicted student failure risk by analyzing 20+ features including attendance patterns, assignment completion, and grade trends, achieved 93% accuracy and 96% recall, enabling timely advisor intervention.
• Handled severe class imbalance (75/25 split) by rebalancing training data and adjusting model thresholds to catch at-risk students the model was initially ignoring.
• Segmented students into 5 behavioral clusters revealing patterns like attendance decline and assignment gaps that preceded failure but weren't captured in grade reports.

Grandmaster Chess Coach — CLI AI Agent
• Built a local-first AI chess coaching agent that analyzes chess.com games using Stockfish engine evaluation and a locally hosted LLM (Ollama + Qwen 2.5), running entirely on-device with no API costs.
• Implemented long-term memory (Supernote) so the agent recalls a player's recurring mistakes and tracks improvement across sessions.
• Added opponent scouting that analyzes public chess.com archives to generate pre-game preparation reports.

SKILLS

Languages: Python (pandas, NumPy, scikit-learn, matplotlib), SQL
Machine Learning: Supervised Machine Learning Algorithms
AI / LLM: PyTorch, Open Source Models, LLM Agents, RAG
Data Platforms: Azure Databricks, Azure Data Factory, Snowflake, Power BI
Cloud & Infrastructure: AWS, Azure, Red Hat, Ubuntu
DevOps: Terraform, Git/GitLab, Puppet, RHCSA Certified

ACHIEVEMENTS

- Ranked in top 5% at Cognizant for two consecutive years (2022–2023).
- Awarded \$2,000 merit scholarship by Kaplan International for master's program at University of Connecticut.