

Pratham Pradhan

pradha11@msu.edu | (616) 309-8213 | [linkedin.com/in/prathampradhan](https://www.linkedin.com/in/prathampradhan) | github.com/pratt2321

EDUCATION

Michigan State University, College of Engineering, GPA: 3.7/4.0

East Lansing, MI

Bachelor of Science in Computational Data Science

December 2025

WORK EXPERIENCE

GE Aerospace

Cincinnati, OH | Detroit, MI

Data Science & AI Strategy Intern

May 2025 – August 2025

- Deploying XGBoost and CatBoost models on Amazon Sagemaker to predict engine part repair or replacement.
- Building a Retrieval-Augmented Generation (RAG) pipeline using LangChain and Chroma to enhance an internal LLM's ability to retrieve and synthesize domain-specific documentation for engineer support.

Data Solutions Engineer Intern

May 2024 – August 2024

- Designed and implemented an automated pipeline using Azure Automation to parameterize KQL Saved Searches, validate queries, maintain run state, and export results in JSON/CSV, reducing manual development time by 80% and documenting the process in GitHub Wiki.
- Collaborated with data visualization experts to resolve operational issues and created a Genba-informed Standard Work guide, reducing developer onboarding time by 50%.
- Developed AWS Lambda and Azure Automation modules to monitor Log Landing Zone (LLZ) data health, send alerts, and visualize source coverage, cutting triage time by 60%.

GreenStone Farm Credit Services

East Lansing, MI

Support Analyst Intern

May 2023 – August 2023

- Diagnosed and resolved network, hardware, and software issues across 35 locations using system logs and diagnostic tools, improving issue resolution times and meeting monthly KPI benchmarks.
- Analyzed access patterns in Azure Active Directory and Office 365 to enhance user provisioning and security controls, reducing access-related incidents and supporting internal audit readiness.

PROJECTS

MSU College of Engineering

East Lansing, MI

Undergraduate Researcher

August 2022 – Present

- Applied deep learning models (CNNs, SVMs) to EEG data from a 23-subject meditation study, uncovering cognitive improvements in young adults, resulting in two abstract acceptances at the Society for Neuroscience.
- Developed and maintained an interactive research website that simplified technical findings for non-expert audiences, generating 25+ monthly inquiries and reducing bot traffic by 80% using reCAPTCHA.

TechSmith

East Lansing, MI

Data Scientist (Capstone Project)

January 2025 – May 2025

- Engineered and merged 3,000+ Camtasia Pro subscription records with 300 custom features and trained a LightGBM churn model that reached 72% accuracy.
- Ran TPOT AutoML on 250+ candidate pipelines on MSU's HPC cluster and identified interpretable models that boosted ROC AUC from 0.8 to 0.87 and reduced false positives by 15%.
- Deployed an interactive Streamlit dashboard on Streamlit Cloud, enabling the data engineering team to generate 400+ feature-pair churn heatmaps on-the-fly for new data and cutting analysis turnaround by 75%.

SKILLS

Programming Languages: Python (PyTorch, scikit-learn, Pandas), R, SQL, PowerShell

Cloud, AI & Analytics: Azure, AWS, RAG, Git, Excel, A/B Testing, Tableau, Streamlit, Docker

Statistics: Hypothesis Testing, Regression Analysis, t-tests, chi-square tests, CLT, Bayesian methods, type I & II errors

LEADERSHIP AND ORGANIZATIONS

Spikeball Club | *Division II Athlete*

January 2023 – Present

AI Club | *Outreach Advisor, Vice President, Secretary*

May 2023 – Present

SpartaHack X | *Finance Director*

May 2024 – May 2025