Nushla Pradhan

nushlapradhan@gmail.com . 765-301-2518 . LinkedIn

EDUCATION

DePauw University - Bachelor of Arts , Computer Science major, Business Analytics minor   **08/2022 - 05/2026**

University of Oxford - Associate Student in Artificial Intelligence (Study abroad)   **09/2025 - 12/2025**

Honors and Involvements: DePauw Merit Scholarship, Science Research Fellow, Outstanding Leadership Award, Computer Science Honor Society, Excellence in Social Wellness Programming, Dean's List (every semester)

Relevant courses: Web Programming, Artificial Intelligence, Machine Learning, Business Analytics, Statistics

WORK EXPERIENCE

Web Management Intern, DePauw Communications & Marketing Office   **05/2025 - Present**

- Defined and documented technical and product requirements for 1,500+ university web pages as part of an AI-driven search and generative engine optimization initiative, translating stakeholder needs into structured specifications for developers and designers.
- Collaborated cross-functionally with Marketing, IT, and academic leadership (10+ stakeholders) to prioritize features, manage project timelines, and ensure technical deliverables aligned with business and user experience goals.
- Applied data-driven analysis and generative engine optimization strategies to improve content architecture, increasing web content discoverability and supporting AI search indexing.

ML/AI Research Intern, Computing Research Association   **05/2024 - 08/2024**

- Researched AI-based Sign Language Recognition (SLR) for a VR learning platform, analyzing training datasets and model performance to improve accessibility for 100+ potential platform users.
- Identified selection bias across training samples and proposed dataset balancing strategies to improve model generalization and reliability.
- Conducted a comparative analysis of 10+ AI and computer vision accessibility tools and presented actionable recommendations at the XR Access Conference.

Development & Alumni Data Management Intern, DePauw University   **01/2023 - 05/2025**

- Maintained and validated 15,000+ alumni and donor records in Abila Millennium to support engagement campaigns and fundraising analytics.
- Redesigned internal data workflows and automation processes, reducing record update time by 20% and improving team productivity.
- Executed database queries and quality checks that supported data-driven decision making across 3+ departments.

PROJECTS

Period Productivity Prediction Model   **02/2026 - Present**

- Built an end-to-end machine learning pipeline in Python to predict productivity outcomes from menstruation cycle data using preprocessing, feature engineering, and classification models.
- Improved model performance by 15% through PCA and feature selection, evaluating models with cross-validation, accuracy, F1 score, and AUC metrics.

Neural Network Image Classification (Fashion-MNIST)   **11/2025 - 12/2025**

- Implemented 1-layer and 2-layer multilayer perceptrons (MLPs) from scratch in Python to classify 10,000+ image samples from the Fashion-MNIST dataset.
- Achieved 85% classification accuracy by implementing ReLU activation, softmax output, and backpropagation optimization.

SKILLS

Languages: Python, JavaScript, SQL

Frameworks/Tools: Vue.js, Pandas, NumPy, Scikit-learn, Git, Jupyter Notebook, Excel

Concepts: Machine Learning, Neural Networks, Data Analysis, Feature Engineering, PCA, Model Evaluation

Databases: Abila Millennium, Data Management Systems