Prakshal Bhandari

Portfolio | (+1)343-598-7418 | pbhan073@uottawa.ca | LinkedIn | GitHub

Education

University of Ottawa — Ottawa, ON
Master of Engineering, Electrical and Computer Engineering — *Sep. 2024 – May 2026*

Charusat University — Gujarat, India
Bachelor of Technology, Computer Science (CGPA: 9.53/10) — *Aug. 2020 – May 2024*

Technical Skills

Languages: Python, JavaScript, C/C++, SQL, HTML/CSS
Tools/Frameworks: PyTorch, Tensorflow, Keras, Numpy, Pandas, Streamlit, Git, React.js, Node.js
Concepts: Probability, Statistics, Unstructured-Structured Data Analysis, Computer Vision, Feature Engineering, Supervised-Unsupervised Learning, Convolution Neural Networks, Linear Regression Models

Experience

AI/ML Intern — Dec 2023 - April 2024
Dhyey Technologies (OPC) PVT. LTD. DBA TechXi — *Gujarat, India*

- Developed a dynamic deep learning model for bird species classification, deployed using Streamlit, enabling 92% accuracy in identification.
- Utilized Robotic Process Automation (RPA) to automate the retrieval and description of bird species data, cutting manual processing time by 40%.
- Created a hand gesture-controlled presentation system with Python, OpenCV, and MediaPipe, enhancing accessibility for individuals with mobility impairments by providing a hands-free alternative to input devices.
- Conducted data analysis on large datasets using Python, Pandas, Excel, and Power BI, uncovering trends and insights that improved operational efficiency by 25% and accuracy by 15%.

Machine Learning Intern — May 2023 - June 2023
Raven Technolabs — *Gujarat, India*

- Performed web scraping to gather customer reviews for sentiment analysis from various websites, such as Flipkart and Blinkit.
- Achieved 88% accuracy in model predictions, providing actionable insights for 10K+ reviews and helping businesses enhance customer satisfaction.

Python Developer — May 2022 - June 2022
Sparks To Ideas — *Gujarat, India*

- Developed a full-featured website using Django, implementing user authentication, database management, and responsive design, which improved user engagement by 30%.

Projects

Lip Reading Model | *Sequential Neural Network, Streamlit Framework, Python* | GitHub

- Developed a lip reading model using machine learning and computer vision to interpret spoken words from video.
- Built with Streamlit, providing an interactive and user-friendly interface for real-time predictions.
- Enabled users to upload videos for lip movement analysis, achieving 90% accuracy in word recognition.

Career Prediction Tool | *Gaussian Naive Bayes Algorithm , Django , Python , HTML , CSS* | GitHub

- Developed a career prediction tool using machine learning to recommend optimal career paths based on skills, education, interests, and experience, achieving 87% accuracy.
- Built with Django for robust backend development and seamless integration with predictive models.

Publications

A novel system for Brain Tumor Detection and Localization | Link
IEEE Transactions on Pattern Analysis and Machine Intelligence

- Conducted research to develop a deep learning model for accurate brain tumor detection in MRI scans, achieving over 90% accuracy and demonstrating promising results for improved patient outcomes in neurology.
- Implemented image enhancement and data augmentation techniques to optimize model performance and increase training data diversity.
- Achieved effective tumor localization, contributing to improved precision and outcomes in brain tumor detection.