

Bimarsh Shrestha

0411 755 269 | bimarshshrestha2515@gmail.com | Hurstville, NSW | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Master of Data Science student at Macquarie University with hands-on experience in Python, SQL, R, Power BI, and machine learning. Proven ability to build predictive models, engineer data pipelines, and deliver actionable dashboards. Passionate about applying data-driven solutions to real-world business problems and supporting evidence-based decision-making.

SKILLS

Languages & Data: Python, R, SQL, Pandas, NumPy, Scikit-learn

Databases: MySQL, SQLite

Visualisation & BI: Power BI, Matplotlib, Seaborn, Tableau

Frameworks & Tools: Django, Flask, REST APIs, Git/GitHub

Machine Learning: Logistic Regression, SVM, Random Forest, Gradient Boosting, KNN, MLP, CNN (EfficientNet, ResNet), Deep Learning

Soft Skills: Problem-solving, Critical Thinking, Team Collaboration, Communication, Adaptability

WORK EXPERIENCE

Data Science Intern — Sivalaya InfoTech, Nepal

2024

- Built and deployed machine learning models for predictive analytics using Python (Pandas, NumPy, Scikit-learn), covering data cleaning, feature engineering, and model evaluation.
- Collaborated with senior developers to integrate ML models into Django web applications via REST APIs.
- Documented model performance and communicated technical insights to non-technical stakeholders.

Intern — Nepal Telecom (NTC), Nepal

2024

- Analysed network performance data and produced technical reports in a large-scale telecom environment.
- Developed understanding of telecommunication systems, switching, and mobile communication fundamentals.
- Strengthened data handling, problem-solving, and teamwork skills in an enterprise setting.

EDUCATION

Master of Data Science — Macquarie University, Sydney

2024 – Present

Bachelor of Engineering (Information Technology) — NCIT, Nepal

2019 – 2024

PROJECTS

AI-Based Diet & Nutrition Analysis System (CNN, LLM, Streamlit)

- Designed an end-to-end nutrition analysis pipeline using EfficientNet-B0 CNN trained on the Food-101 dataset for food image classification.
- Integrated the USDA FoodData Central API to retrieve per-ingredient nutritional data and built a rule-based recommendation engine.
- System handles unstructured image input and returns macro/micronutrient breakdowns with personalised dietary recommendations.

NoteTrove — E-Commerce Platform (Django, Python)

- Developed a full-stack Django application for buying and selling study notes, targeted at university students.

- Implemented authentication, role-based access, and user profiles to manage uploaded and purchased content securely.
- Integrated online payment processing (Stripe API) with secure transactions and purchase history tracking.
- Designed relational database schema (SQLite/MySQL) for scalable management of users, notes, and transactions.
- Delivered a responsive interface (HTML, CSS, JavaScript) ensuring seamless cross-device user experience.

Concentration Detection System (OpenCV, MediaPipe, Python)

- Built real-time face tracking with MediaPipe Face Mesh and OpenCV, estimating head pose (yaw/pitch/roll) to infer on-screen attention.
- Designed a concentration score with calibrated thresholds; logged timestamped attention signals and generated daily/weekly focus reports.
- Visualised trend windows to support study and time-management interventions using Python and Power BI.

Student Outcome Prediction (Python, Machine Learning)

- Classified student outcomes (Graduate, Dropout, Enrolled) using academic, demographic, and socioeconomic features.
- Benchmarked Logistic Regression, KNN, SVM, Random Forest, Gradient Boosting, and MLP; tuned via RandomizedSearchCV and RFE.
- Evaluated models using Accuracy, F1-Score, and ROC-AUC; tree ensembles achieved best performance; built rollout dashboards for early interventions.

Plant Disease Detection (CNN, Django)

- Trained a CNN on labelled plant-leaf image datasets achieving over 90% classification accuracy across multiple crop diseases.
- Integrated the trained model with a Django backend for real-time image upload and disease diagnosis via a responsive web interface.

CERTIFICATIONS

- TAFE NSW Certificate — Australia
- Python Django Development Certificate — Sipalaya InfoTech
- Data Analysis with Python — freeCodeCamp
- Data Science Internship Certificate — Sipalaya InfoTech
- Internship Certificate — Nepal Telecom (NTC)