

BIDISHA AMATYA

Full-Stack Developer | AI/ML Enthusiast

9862799099 • Thapathali, Kathmandu • bidisha.amatya@gmail.com • github.com/bidishalamatya

SUMMARY

Computer Engineering graduate with hands-on experience in backend development using FastAPI and Django, frontend development with React, and AI model development using PyTorch, gained through academic projects and a hands-on internship as an AI and Python Developer. Experienced in building and integrating machine learning models into real-world applications through RESTful APIs. Demonstrated leadership as President of the Computer Club, with strong collaboration, communication, and problem-solving skills. Adaptable, detail-oriented, and committed to continuous learning, seeking to contribute to impactful projects while further strengthening technical and problem-solving skills.

EXPERIENCE

AI and Python Developer — Darvi Lab *[March 2026 – September 2026]*

- Owned the backend for a project management tool built with Python and Django, including data models, business logic, and API endpoints
- Diagnosed and resolved bugs in Kiko Chat, a production chat application, working within a pre-built codebase without disrupting live functionality
- Collaborated with existing developers to adapt quickly to established engineering conventions across both projects

PROJECTS

Sign Language Storytelling System [\[github\]](#)

- Built a system converting stories into structured sign-language output using NLP preprocessing and rule-based transformations
- Trained an Encoder–Decoder LSTM model for sequence generation
- Developed a FastAPI backend for model inference and API integration
- Created a modular React frontend with a focus on accessibility

Emotion Detection System [\[github\]](#)

- Built a real-time emotion detection system that classifies emotions and recommends YouTube songs
- Trained a supervised emotion classification model using PyTorch on FER - 2013 dataset with 7 emotion types, including preprocessing and the full training pipeline
- Deployed the model via a FastAPI REST API for real-time inference and backend processing
- Developed a React frontend integrated with the YouTube API to display emotions and recommend songs

E-Commerce Platform [\[github\]](#)

- Built a full-stack web application using Django
- Implemented product listing, cart, and pricing features
- Managed database operations using the Django ORM

Financial Advisor App [\[github\]](#)

- Developed a questionnaire-based recommendation system using rule-based NLP
- Implemented structured logic to process user responses and generate financial allocation outputs
- Built the application using Django Forms and the Django ORM

EDUCATION

Bachelor of Computer Engineering | 2021 - 2026

Himalaya College of Engineering — Graduated 2026 with Distinction

Merit-Based Scholarship Student

KEY SKILLS

Programming: Python, JavaScript, SQL,

Web Development: Django, FastAPI, React, HTML, CSS

Databases: SQL, PostgreSQL

AI / ML: PyTorch, NLP Preprocessing, Model Training & Evaluation, scikit-learn, Rule-based NLP, Numpy, Pandas

Tools: Git, VS Code, Docker

Soft Skills: Communication & presentation, critical thinking, problem-solving, collaborative teamwork

LEADERSHIP

President, Computer Club

- Led events, workshops, and technical activities
- Mentored juniors in programming

CERTIFICATIONS

- Django Web Development
- Generative AI and LLM