

FOYSAL AHMED PRANTO

Generative AI Developer | IEEE-Published Researcher | Automation Engineer

Dhaka, Bangladesh | +880 1313-990906 | foysalpranto2002@gmail.com
prantodev.netlify.app | linkedin.com/in/foysal-ahmed-pranto | github.com/foysalpranto121

PROFESSIONAL SUMMARY

Generative AI Developer and IEEE-published researcher specializing in AI agents, workflow automation, and intelligent application development. Experienced in building and deploying production-grade AI systems using LangChain, OpenAI, Retrieval-Augmented Generation (RAG), and modern MLOps tooling including Docker, AWS, and CI/CD pipelines. Author of a peer-reviewed IEEE paper on multilingual NLP and creator of 14+ deployed AI projects, including a published VS Code Marketplace extension. Passionate about building intelligent systems that automate processes and improve real-world decision-making.

TECHNICAL SKILLS

Generative AI & ML: LangChain, OpenAI (GPT-4o-mini), Hugging Face Transformers, Retrieval-Augmented Generation (RAG), Natural Language Processing (NLP), Prompt Engineering, AI Agents, Machine Learning, Scikit-learn, NLTK

Automation & Workflows: n8n, REST API Integration, Webhooks, AI Workflow Automation, Lovable

Programming Languages: Python, JavaScript, TypeScript, PHP, SQL, HTML, CSS

Web & App Frameworks: FastAPI, Flask, LangServe, Streamlit, Node.js, Bootstrap, Flutter

Databases & Vector Stores: Pinecone, ChromaDB, SQLite, Firebase

MLOps & Cloud: Docker, AWS EC2, GitHub Actions (CI/CD), Git

Data & Business Intelligence: Power BI, Tableau, Google Sheets, Data Analysis

Tools & Platforms: VS Code, VS Code Extension API, Jupyter Notebook, Google Colab, Swagger UI

Soft Skills: Problem Solving, Research & Documentation, Leadership, Team Collaboration, Communication

PUBLICATIONS & RESEARCH

- **MixTox-SA — IEEE Xplore (2025):** Co-authored a peer-reviewed IEEE paper presenting MixTox-SA, a mixed-code multilingual toxicity-detection dataset for South Asian social media, covering Bangla, Banglish, Hindi, and English code-switching patterns. [click here](#)
- **MixTox-SA Dataset — Mendeley Data, Elsevier:** Published an open dataset of ~13,000 manually annotated multilingual comments for toxicity classification, freely available to the global NLP research community. [click here](#)

PROFESSIONAL EXPERIENCE

Business Analyst Intern

Dec 2025 – Present

Youth Development Institute — Dhaka, Bangladesh

- Conduct business analysis and deliver strategic insights for entrepreneurship-focused projects.
- Analyze market trends, competitor strategies, and business performance data to support decision-making.
- Collaborate with cross-functional teams to improve workflow efficiency and operational decisions.

EDUCATION

Daffodil International University

Expected Graduation: January 2027

Bachelor of Science (BSc) in Software Engineering | CGPA: 3.92 / 4.00

Higher Secondary Certificate (HSC) & Secondary School Certificate (SSC) — Science 2021 & 2018

Perfect GPA: 5.00 / 5.00 in both examinations

PROJECTS

NeuroMedi-AI | [click here](#)

Tech: Python, Flask, LangChain, OpenAI GPT-4o-mini, Pinecone, Hugging Face, Docker, AWS EC2, GitHub Actions, RAG

- Built an AI medical assistant delivering context-aware healthcare conversations using RAG, LangChain, and GPT-4o-mini, with medical PDFs ingested into a Pinecone vector database and semantic search via Hugging Face embeddings.
- Deployed on AWS EC2 with Docker containerization and an automated GitHub Actions CI/CD pipeline; maintains multi-turn conversation memory.

CodeGiri — Bangladeshi Coding Companion | [click here](#)

Tech: TypeScript, VS Code Extension API, Node.js

- Published a VS Code Marketplace extension that reacts to errors, warnings, and merge conflicts with regional Bangla humor and optional sound effects.
- Engineered an achievement system, customizable intensity settings, and four regional Bangla modes — shipped as a real product used by developers.

Mother & Child Guide | [click here](#)

Tech: AI, n8n Automation, Lovable, Voice Interaction

- Designed an AI maternal companion offering instant guidance on prenatal care, newborn care, and parenting, with hands-free voice interaction and a production-ready interface powered by n8n automation.

AI Resume Analyzer | [click here](#)

Tech: Streamlit, NLP, ChromaDB, OpenAI

- Created an AI resume analysis system with ATS scoring, semantic similarity matching, skill-gap detection, and AI-generated HR feedback.

Student Management System with AI Assistant | [click here](#)

Tech: Flask, LangChain, ChromaDB, OpenAI

- Developed a student management platform with grading, attendance, automated PDF reports, AI-powered risk detection, and natural language querying.

Lifestyle Mart | [click here](#)

Tech: Flask, SQLite, OpenAI API, Bootstrap

- Built a full-stack e-commerce platform with authentication, cart, reviews, and an admin dashboard, plus an AI shopping assistant with RAG-based product retrieval.

Amazon Kindle Review Sentiment Analysis | [click here](#)

Tech: Python, NLP, Scikit-learn, NLTK

- Implemented an NLP sentiment analysis pipeline with TF-IDF and Bag-of-Words, training machine learning models for review classification.

Additional Projects

- **AI Language Translator API** (FastAPI, LangChain, OpenAI, LangServe) — Multilingual AI translation API with Swagger UI and a modular backend. [click here](#)
- **NotebookFusion** (Python, Jupyter) — Productivity tool to render websites and YouTube videos inside Jupyter notebooks; published on PyPI. [click here](#)
- **AI Customer Support Automation** (n8n, OpenAI API, Webhooks) — Automated chatbot responses, ticket routing, and email notifications via n8n workflows.

- **AI Content Generation Workflow** (n8n, OpenAI API, Python) — AI workflows for automated blog and social media content generation.
- **Business Analysis Chatbot** (Python, AI Chatbot) — AI chatbot delivering business insights and performance analysis. [click here](#)

ACHIEVEMENTS & AWARDS

- **Winner — Build With AI Hack Days @ DIU, SmartCalAI (May 2026):** Selected as a winning project; awarded a .xyz domain and one year of free hosting.
- **Finalist — ICADHI-2026, IEEE International Congress on AI & Digital Health Innovations (Jun 2026):** Presented an AI project at the final-round showcase held at Daffodil International University.
- **Finalist — The Infinity AI Build Fest 2026:** Selected in the preliminary round of the competition by CloudCamp Bangladesh and BRAC University.
- **1st Place — Daffodil International MUN 2025 (Dec 2025):** Secured first position; awarded a gold appreciation crest and Certificate of Appreciation.

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Senior Deputy Secretary, Research Wing

DIU Software Engineering Club

- Lead the Research Wing, coordinating academic research activities, technical programs, and student publications.
- Support collaborative research initiatives and hands-on workshops for club members.