NISHI KANTA PAUL

✉ nishikantapaul108@gmail.com 📞 +8801767705861 📍 Sylhet ⦿ Paul72 in Paul72 🔗 Portfolio

Education

B.Sc. in Computer Science and Engineering,   2020 – 2024
Ahsanullah University of Science and Technology   Dhaka, Bangladesh
CGPA: **3.749** out of 4.00 (7th out of 100)

Teaching Experience

Competitive Programming Mentor(Remote), *Shohoj Coding*   09/2024 – present
Taught topics such as Graph Theory, Number Theory, and Data Structures.

Research Experience

Voluntary Researcher – AI in Healthcare (Remote)   02/2025 – present
AI-Driven Parkinson's Disease Screening System
University of Alabama at Birmingham & Temple University
- Designing ML pipelines for voice-based Parkinson's detection
- Conducting signal processing and feature extraction using Python (Scikit-learn, PyTorch)
- Integrating **Large Language Models (LLMs)** to enhance automated medical interpretation and reporting

AI & ML Project

NeuroSight: AI-Powered Brain Tumor Detection ⧉
Technologies: Python, TensorFlow, Keras, Flask
- Built a CNN-based web app (VGG16) to detect brain tumors from MRI scans with high-confidence predictions
- Deployed model via Flask and ensured a seamless frontend-backend integration

PDF Insight Chatbot ⧉
Technologies: Python, Flask, Ollama, SentenceTransformers, PyMuPDF
- Created a semantic search–driven chatbot that answers questions from user-uploaded PDF documents
- Integrated local LLMs and vector embeddings for accurate, context-aware responses

Quizzify – AI Interview Question Generator ⧉
Technologies: Python, Flask, Ollama, LLMs (Phi/Mistral)
- Developed an AI-powered web app that generates technical interview questions based on job roles
- Used local LLMs with customizable difficulty and markdown export

Publications

Video-based Driver Distraction Detection using Transfer Learning: Bangladesh Perspective (Published) ⧉
International Conference on Advances in Computing, Communication, Electrical and Smart Systems 2024

Comparative Analysis of Hybrid Deep CNN Models in the Classification of Pulmonary Diseases (On going research)

Industry Experience

Software Engineer-I, *Brain Station-23*   03/2025 – present
Frontend Developer (HTML , CSS , JavaScript , TypeScript , React , Next.js)   Dhaka, Bangladesh
- Developed scalable web applications using React, Next.js, and TypeScript.
- Implemented modules for authentication, inventory, billing, and payment (bKash/card).
- Collaborated with cross-functional teams to deliver secure and responsive UI components.

Skills

Programming Languages
Python, C++, C, C#, Java, JavaScript, TypeScript, HTML, CSS, PHP

AI/ML Libraries & Tools:
Scikit-learn, PyTorch, TensorFlow, Keras, Transformers, OpenCV, Pandas, NumPy, Matplotlib, LangChain, NLTK, spaCy

Web & Frameworks:
React, Next.js, Node.js, Express, Redux, ASP . NET MVC, Flask, JavaFX

Databases
MySQL, MongoDB, Firebase, MS SQL Server

Tools
Git, GitHub, Linux, Postman, LaTeX, Jupyter Notebook, Google Colab, Hugging Face

Competitive Programming

Profiles: Codeforces ⧉ | CodeChef ⧉ | LeetCode ⧉ | Toph ⧉ | StopStalk ⧉
Programming Contests
- **ICPC Asia Dhaka Regional Contest 2023** ⧉ – **Rank: 116th** *(Team: AUST_Tactless)*
- **Intra AUST Programming Contest – Spring 2022** ⧉ –**Rank: 1st** *(Team: AUST_Durnibar)*

Software Developments

EduHub44 ⧉
EduHub44 is an educational website developed in PHP, HTML, CSS, and Bootstrap 5 integrated with MySQL.

PersonalDiary ⧉
PersonalDiary is a Desktop application developed in JavaFx and MySQL.

SnapShop-Customer ⧉
Developed a responsive e-commerce platform using React, TypeScript, Tailwind CSS, and Context API with features like product browsing, cart/wishlist management, authentication, multilingual support, and payment integration.

References

Forhad An Naim, *Staff Engineer I (Chief Engineer),* Samsung R&D Institute Bangladesh
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Mr. Mohammad Moinul Hoque, *Associate Professor,* Ahsanullah University of Science and Technology
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