

# NISHI KANTA PAUL

✉ nishikantapaul108@gmail.com ☎ +8801767705861 📍 Sylhet 🔄 Paul72 🌐 Paul72 🔗 Portfolio

## Education

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

2020 – 2024  
Dhaka, Bangladesh

## Teaching Experience

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

09/2024 – present

## Research Experience

**Voluntary Researcher – AI in Healthcare (Remote)**  
*AI-Driven Parkinson's Disease Screening System*  
University of Alabama at Birmingham & Temple University

02/2025 – present

- 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

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**Software Engineer-I**, *Brain Station-23*

03/2025 – present

**Project: ObhaiVTS (Vehicle Tracking System)**

Dhaka, Bangladesh

- **Hub Management:** Built filterable, paginated tables with create/update forms (React Hook Form) and real-time API integration via TanStack Query.
- **SIM/Device/Technician/Vehicle Management:** Developed CRUD flows with Zustand-based state management and seamless API sync.
- **Package Management:** Implemented add/update/delete operations with optimized data handling.
- **Admin Dashboard:** Designed sidebar & reusable UI components (table, modal, filter, pagination) using Tailwind + Shadcn for a cohesive dashboard experience.

## Skills

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### 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

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**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

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### 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

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**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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