

Nishi Kanta Paul

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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

Higher Secondary Certificate (HSC)
Sylhet Government College
GPA: **5.00** out of 5.00

2017 - 2019
Sylhet, Bangladesh

Secondary School Certificate (SSC)
Boiragi Bazar High School
GPA: **4.67** out of 5.00

2014 - 2016
Sylhet, Bangladesh

INDUSTRY EXPERIENCE

Software Engineer-I, Brain Station-23 PLC

Mar 2025 - present

ObhaiVTS – Frontend Engineer

Technologies: React, Tailwind CSS, Shadcn, Zustand, TanStack Query

- Enhanced data handling efficiency by 30% through server-side pagination and dynamic filtering
- Improved application responsiveness and real-time updates via TanStack Query integration
- Reduced UI inconsistencies by 20% with centralized Zustand state management

OneID – Client Portal (Django Admin)

Technologies: Django, Keycloak

- Increased admin efficiency by 25% through real-time analytics dashboard implementation
- Reduced document processing errors by 20% via optimized upload workflows and status tracking
- Secured user sessions with Keycloak-compliant authentication and logout mechanisms

OneID – Backend Engineer

Technologies: FastAPI, PostgreSQL JSONB, Keycloak

- Accelerated document processing speed by 35% through PostgreSQL JSONB metadata system implementation
- Reduced invalid submissions by 30% with comprehensive NID validation logic
- Implemented Keycloak encryption protocols to secure sensitive user data

TEACHING EXPERIENCE

Adjunct Lecturer, Department of CSE

Jan 2026 - present

International Standard University, Dhaka

- Teaching Robotics, IoT, and Competitive Programming courses to prepare students for industry standards
- Designed hands-on laboratory exercises and projects to enhance student employability
- Developed comprehensive course materials aligned with contemporary technological trends

Competitive Programming Mentor (Remote)

Shohoj Coding

Sep 2024 - Dec 2025

- Mentored 50+ students in advanced topics including Graph Theory, Number Theory, and Data Structures
- Increased student contest performance by 30% through targeted practice sessions and problem-solving strategies
- Designed structured curriculum and practice sets for skill progression

RESEARCH EXPERIENCE

Voluntary Researcher – AI in Healthcare (Remote)

Feb 2025 - present

- **AI-Driven Parkinson's Disease Screening System** - University of Alabama at Birmingham & Temple University
- Designing machine learning 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 PROJECTS

NeuroSight: AI-Powered Brain Tumor Detection

[GitHub](#)

Technologies: Python, TensorFlow, Keras, Flask

Built a CNN-based web application (VGG16) to detect brain tumors from MRI scans with high-confidence predictions. Deployed model via Flask and ensured seamless frontend-backend integration.

PDF Insight Chatbot

[GitHub](#)

Technologies: Python, Flask, Ollama, SentenceTransformers, PyMuPDF

Offline PDF chatbot that uses local LLMs and semantic search to answer questions from uploaded PDF documents via web or CLI interface.

Quizzify – AI Interview Question Generator

[GitHub](#)

Technologies: Python, Flask, Ollama, LLMs (Phi/Mistral)

Offline AI-powered web application that generates role-based technical interview questions using local LLMs, with Markdown export and difficulty-level selection.

SOFTWARE DEVELOPMENT PROJECTS

LibLMS: Library Management System

[GitHub](#)

Technologies: React, Tailwind CSS, ShadCN UI, PHP

A full-stack library management system with book borrowing, return tracking, PDF downloads, reviews, user notifications, and advanced search functionality.

Restaurant Admin Panel

[GitHub](#)

Technologies: Next.js, PrimeReact, Tailwind CSS

A responsive admin panel for restaurants with real-time menu and order management, form validation, and efficient state handling.

SnapShop-Customer

[GitHub](#)

Technologies: React, TypeScript, Tailwind CSS, Context API

A responsive e-commerce platform supporting product browsing, cart/wishlist, multilingual UI, authentication, and payment integration.

PUBLICATIONS

Video-based Driver Distraction Detection using Transfer Learning: Bangladesh Perspective

 Md. Muhaiminul Kabir, Md Abrar Nawar, Mehedi Islam Remon, **Nishi Kanta Paul**, Hanif Bhuiyan, Md Moinul Hoque
International Conference on Advances in Computing, Communication, Electrical and Smart Systems (iCACCESS), 2024

COMPETITIVE PROGRAMMING

Profiles: [Codeforces](#) | [CodeChef](#) | [LeetCode](#) | [Toph](#)

- ICPC Asia Dhaka Regional Contest 2023 - Rank: 116th (Team: AUST_Tactless)
- Intra AUST Programming Contest – Spring 2022 - Rank: 1st (Team: AUST_Durnibar)

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, Django, FastAPI, JavaFX
Databases	MySQL, PostgreSQL, MongoDB, Firebase, MS SQL Server
Tools	Git, GitHub, Linux, Postman, LaTeX, Jupyter Notebook, Google Colab, Hugging Face, Keycloak

REFERENCES

Forhad An Naim

Staff Engineer I (Chief Engineer)
Samsung R&D Institute Bangladesh
Email: developermitun1990@gmail.com
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Mr. Mohammad Moinul Hoque

Associate Professor
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