NIRMAL BOGHARA

Brooklyn, NY | nb3964@nyu.edu | +1347-628-3769 | [Portfolio](#) | [Linkedin](#) | [Github](#)

Education

New York University, MS in Computer Science   Expected May 2026
- **Coursework:** Design and Analysis of Algorithms, Information Security and Privacy, Principles of Database Systems

University of Mumbai, BE in Computer Engineering (**GPA:8.95/10**)   Jun 2024
- **Coursework:** Operating Systems, Machine Learning, Computer Networks, Applied Cryptography, Data Structures

Experience

Software Engineering Intern, Bitnine – San Francisco, CA   Apr 2024 – Jun 2024
- Contributed as a junior developer on OCI C driver for PostgreSQL, achieving improved Oracle compatibility through reverse engineering. Optimized & enhanced ODBC C driver for PostgreSQL databases with Oracle compatibility, resulting in performance gain in query executions.
- **Resolved 20+ critical issues** in the Python driver for Apache AGE project as an open-source contributor, enhancing its stability and reliability. Initiated Oracle OCI driver development in C for PostgreSQL databases from scratch, achieving compatibility with Oracle and scalability, and providing a framework for subsequent phases.

Artificial Intelligence Intern, Soulible Digital – Maharashtra, India   Sep 2023 – Nov 2023
- Engineered an attendance tracking system using YOLOv7 with TensorFlow and Keras, reducing manual tracking by 15%.
- Analyzed the face recognition attendance system using Python, NumPy, and Pandas, collaborating with cross-functional teams to implement optimizations, **boosting efficiency by 30%.**

Software Development Engineer Intern, Feat Systems – Maharashtra, India   May 2023 – Aug 2023
- Resolved software defects and enhanced product functionality through Java and Spring Boot optimizations, resulting in a **15% reduction in customer complaints.**
- Documented the entire development process, utilizing GitHub for version control and Jira for task management, ensuring up-to-date and easily accessible resources.
- Streamlined access to critical information using MySQL, resulting in a notable **30% acceleration** in new team member onboarding processes.

Full Stack Developer Intern, Goldenmace IT Solutions – Maharashtra, India   May 2022 – Jul 2022
- Led the development of a business dashboard using React.js, Node.js, and Angular.js, improving client satisfaction by 20% through an intuitive user interface.
- Implemented TypeScript and Svelte for code optimization and caching mechanisms, **boosting dashboard performance by 30%.** Integrated PostgreSQL and MongoDB for data storage, ensuring fast and efficient data retrieval.

Technical Skills

Languages: Java, C#, SQL, JavaScript, HTML, R
Development: Golang, Django, Node.js, React.js, Svelte, TypeScript, Springboot, PHP, Three.js, WebGPU
Tools: Git, Github, AWS, Docker, MS Excel, VSCode, Jira, Microsoft Azure, Matlab
Machine Learning: TensorFlow, PyTorch, Scikit-learn, Keras, NumPy, Pandas, Matplotlib, Amazon SageMaker
Data: PostgreSQL, MySQL, MongoDB, Apache Cassandra, Hadoop, Kafka

Projects

Tutor.ai (Local LLMs, ONNX Runtime, LM Studio, RAG, Streamlit, NPU, Machine Learning)   [Github Link](#)
- Developed a Teaching Assistant designed in way specially for teachers in rural areas facing network issues, which uses Local LLMs(Llama 3.2-3B) by LM Studio. Leveraged **ONNX Runtime** for **NPU optimization**, and implemented RAG for higher accuracy. Wrapped by Streamlit, where teachers can choose variety of options to help students in their studies.

FitFarm - Smart Agriculture System (Machine Learning, Python, IoT, JavaScript)   [Github Link](#)
- Designed supervised ML algorithms (DT, SVM, RF, and NB) using Python, TensorFlow, and **Scikit-learn** to predict the most suitable crops according to soil conditions with 93% accuracy. Published a [research paper](#) in the IJRASET.

Zinzraa - Top E-commerce on AJIO (ExpressJS, Vite+React, Node.js, MongoDB)   [Website Link](#)
- Spearheaded a user-friendly interface for the shopping website, incorporating **MERN Stack**, leading to a 20% increase in user engagement and a 15% decrease in bounce rate. Deployed CRM and SEO tools to optimize web content and drive organic traffic, resulting in a 30% increase in conversion rates and boost in online sales revenue.

Fittify - One Stop Health Platform (MERN Stack)   [Github Link](#)
- Engineered a comprehensive health solution using React.js and **Node.js**, piloting it with 150 students. Achieved 95% user satisfaction and 25% improvement in health metrics through personalized medical record tracking, diet plans, and workout routines. Successfully scaled to 500+ users while maintaining performance and intuitive UI made with **Tailwind CSS**.