

Tasnim Ur Rahaman Anas

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Software engineer with 2 years of experience in Python, OpenCV, PyTorch, and LLM model development. Currently pursuing an M.Sc. in AI in Italy and seeking summer internship opportunities starting from May 2026 to September 2026

Experience

Software & AI Engineer, [part-time], Techneos – Trento, Italy December 2025 – Present

- Leading the development of a cloud-native SaaS Manufacturing Operations Management (MOM) platform for SMEs, enabling Lean Manufacturing with real-time planning, tracking, and KPI monitoring across 10+ operational metrics
- Leading full-stack development of the core platform, building a Web Planning Console using Next.js (Gantt-based scheduling, task management) and Python FastAPI, deployed as a Dockerized cloud SaaS solution
- Implementing real-time data pipelines for operational visibility and performance analytics (KPIs, OEE), tracking time-stamped events across planning, production, and logistics workflows
- Integrating time-series ML models for automated production scheduling, continuously improving backlog prioritization and increasing resource utilization by 25% across multiple work centers
- **Tech stack:** TypeScript, React, Next.js, Python, Machine Learning, PostgreSQL, FastAPI, Docker, Cloud SaaS

Software Engineer, Ollyo – Dhaka, Bangladesh July 2024 – August 2025

- Part of the core team behind Droip, Ollyo's flagship no-code website builder for WordPress, enabling users to design and deploy sites via a drag-and-drop editor without writing code
- Fine-tuned LLaMA-3 on internal template + prompt datasets and integrated it into the product workflow for prompt-to-layout generation, enabling editable block creation and reducing design time by 20%
- Reduced app startup latency and improved editor responsiveness by 10% by migrating frontend state logic to Redux store, memoizing costly renders, and cutting API calls per load from 25 to 14
- Developed a modular plugin framework for integrating third-party services (e.g., Google Auth, SMTP) through PHP hooks and custom post types, allowing users to add website functionalities without writing code
- Converted Figma designs into reusable React components to improve UI consistency, reducing frontend bugs
- **Tech stack:** JavaScript, React, Redux, PHP, WordPress, Python, Transformers, AI/LLM training, MySQL

Software Engineer Intern, HighRadius – Bhubaneswar, India May 2023 – May 2024

- Joined the AI/ML team developing ML-powered tools for automating financial processes, used by 850+ global enterprises, including Fortune 500 firms
- Built machine learning models to predict future sales from historical invoice data, which helped clients better manage liquidity and reduce cash-flow volatility
- Designed robust data pipelines using pandas to clean and normalize heterogeneous datasets (missing values, inconsistent schemas, outliers), improving model accuracy by 8%
- Refactored 40+ React components from class to functional using hooks to align with the new design system, reducing code duplication by 30% and easing future feature work
- **Tech stack:** TypeScript, React, Redux, Java, Spring Boot, Python, Machine Learning, Data Analysis, MySQL

Research Publications

Anas, T. U. R., Razi, Q., Bajoria, S., Hassija, V., & Chalapathi, G. (2025). Privacy-Preserving Skin Disease Detection Using One-Shot Federated Learning Approach *Cognitive Computation*, 17(6). doi.org/10.1007/s12559-025-10531-0

- Developed a one-shot FL framework for skin disease detection, enhancing diagnostic accuracy while preserving privacy

Debnath, S., Anas, T. U. R., Singh, B. P., Tripathy, H. K., & Dheidan, A. H. (2025). Diseased Skin Dermis Approximation and Validation in Remote Space Using a Cognitive Network with Multiple Hidden Layers. In *Lecture Notes in Networks and Systems* (pp. 559–569). Springer Nature Singapore. doi.org/10.1007/978-981-97-7178-3_47

- Developed a deep learning model using CNN to classify 8 skin diseases with 93.1% accuracy.

Skills

Languages: C++ , Java, JavaScript, TypeScript, Python, PHP, Dart (Flutter), SQL

Frontend: ReactJS, NextJS, Redux, Flutter

Backend & APIs: NodeJS, ExpressJS, Spring Boot, Flask, FastAPI, REST APIs

AI / ML: TensorFlow, PyTorch, Transformers, LLM fine-tuning, Time-series forecasting

Databases: PostgreSQL, MySQL, MongoDB, Firebase (NoSQL)

Cloud & DevOps: Amazon Web Services (AWS), CI/CD, Docker, Git, Linux, Bash

Education

University of Trento, Trento, Italy
M.Sc. in Artificial Intelligence Systems

Sept 2025 – Present
Grade: In progress

Kalinga Institute of Industrial Technology, Bhubaneswar, India
B.Tech. in Computer Science and Engineering

July 2020 – June 2024
Grade: 8.41/10.0