Jacinth Mahanta

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Professional Summary

I am a Master's student in Artificial Intelligence at Lancaster University, with a B.Tech in Electronics and Communication Engineering from NIT Silchar. I have developed strong analytical thinking, problem-solving, and technical understanding through my academic work, along with solid planning, organisational, and communication skills gained from volunteering, mentoring, and part-time roles. I am confident working both independently and as part of a team, and I am now seeking a suitable entry-level or graduate opportunity where I can contribute meaningfully to organisational goals while continuing to develop my professional and academic skills.

Education

MSc

University of Lancaster, Artificial Intelligence — Oct 2025 – Sep 2026
- **Relevant Modules:** Machine Learning, Deep Learning, Natural Language Processing, Advanced Artificial Intelligence, Large Language Models

BTech

NIT Silchar, Electronics and Communication Engineering — Nov 2021 – Jun 2025
- **CGPA**: 8.18/10.0
- **Relevant Modules:** Digital Signal Processing, Computer Networks, Data Structures & Algorithms

Relevant Technical Skills

Programming Languages: C++, Python, Java, TypeScript, HTML, CSS, JavaScript
Frameworks & Libraries: ReactJS, NextJS, Node.js, Express.js, TailwindCSS
Databases & Cloud: MongoDB, AWS DynamoDB, Supabase, PostgreSQL
Design & Tools: Figma, Adobe XD, Git, GitHub, Jupyter Notebook, Vercel, VSCode

Experience

IT Partnering and Innovation (ITPI), Lancaster University, Junior API Developer 25/26 — Lancaster, UK — Dec 2025 – Present
- Developed and supported RESTful APIs for internal university platforms and student-facing services at ITPI, ensuring consistent data exchange between systems.
- Improved API performance and reliability by optimising database queries, adding pagination and filtering, and strengthening input validation and error handling to reduce delays in key workflows.
- Collaborated with developers and stakeholders to design, test, document, and deploy production-ready API features through code reviews and end-to-end validation.

GDGC (formerly GDSC), NIT Silchar, Technical Advisor & Outreach Head — Silchar, India — Aug 2023 – May 2025
- Supported over 200 students across web development, UI/UX design, and cloud computing through structured workshops and mentoring initiatives, enhancing their technical competence in the fields.
- Advised multiple project teams during GDSC NIT Silchar programs on product design, workflows, and deployment using ReactJS, Figma, and Firebase, ensuring efficient project executions.
- Spearheaded various outreach campaigns (like Tech BootCamps, Open-Source Onboarding Programs, etc) that boosted event participation by 40% and strengthened collaboration with campus tech communities through targeted initiatives.

LittleBox India, Full Stack Web Development Intern   Guwahati, India
May 2024 – Oct 2024

- Engineered e-commerce applications using NextJS, ReactJS, and TypeScript by refactoring components, enabling server-side rendering, and optimising API flows, boosting performance by 30%.
- Optimised DynamoDB and MongoDB by redesigning queries, adding indexing, and tuning read/write operations, alongside integrating automated tests that cut bugs by 15% and improved data efficiency by 25%.
- Collaborated with the IT team to design, test, and deploy production-ready features through focused code reviews, end-to-end validation, and streamlined coordination with developers and stakeholders.

National Informatics Centre (NIC), Project Trainee – Networking & Cybersecurity   Guwahati, India
Jun 2024 – Jul 2024

- Designed and analysed three advanced network security protocols at NIC Guwahati by modelling threat scenarios and testing encryption workflows, strengthening data protection by 15%.
- Evaluated security incidents by analysing logs, tracing attack patterns, and prioritising vulnerabilities, enabling targeted mitigation strategies that cut response time by 30%.
- Performed risk assessments on 10+ critical government systems by auditing configurations, reviewing access controls, and mapping exposure points, reducing potential threats by 25%.

Projects

Depression Detection using Facial Recognition and Psychometric Analysis   Jul 2024 - May 2025
Bachelors Thesis Group Project

- Designed and implemented a hybrid deep-learning model that detects early signs of depression by combining facial emotion recognition using CNN and OpenCV with psychometric evaluation through PHQ-9 and BDI questionnaires.
- Conducted large-scale data collection from over 6,900 participants across multiple institutions and achieved 89% accuracy using a multi-modal fusion approach integrating 60% psychometric and 40% facial features.

Tecnoesis 2024 Website   Aug 2024 - Nov 2024
Tech Lead & Developer

- Led the development of NIT Silchar's 2024 flagship technical fest website with a 16-member team, using ReactJS and Tailwind CSS to build a faster, scalable interface that improved performance by 35%.
- Optimised event workflows and overall user experience by integrating dynamic REST APIs, streamlining registrations, schedules, and event updates, which contributed to a 45% rise in participant sign-ups.

Achievements & Leadership

- Served as Judge for the "Hack Into the Web of Creativity: UI/UX Hackathon" (Dec 2024), evaluating 30+ design-based projects on innovation and usability.
- Mentored developers as an Open Source Mentor in programs like GSSoC 2024 and SSoC 2024, guiding contributors on code quality and workflow optimization.

Volunteering Engagement

- Volunteer at British Heart Foundation, supporting daily operations including customer assistance, stock organisation, and handling donated items in a team-based environment.
- Developed strong communication, time management, and organisational skills through regular public-facing responsibilities and collaborative work.