Avishake Adhikary

Machine Learning Engineer | Industry Trainer

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- 15th March 2001
- Kolkata, India
- AvishakeAdhikary



WORK EXPERIENCE

Machine Learning Engineer

Minion Technologies 🛮

June 2025 – Present | Kolkata, India

- Develop and fine-tune advanced medical AI models using PyTorch, LoRA/QLoRA, and Unsloth, optimizing performance for healthcare-specific tasks and enabling costeffective deployment.
- Train custom large language models and adapt state-of-theart open-source models (e.g., DeepSeek R1, Gemma 3n, MedGemma 27B) for medical data analysis and diagnostic applications.
- Utilize distributed training techniques via Genesis Cloud, implementing HPC and Distributed Data Parallel (DDP) strategies to scale model training across multiple GPUs.
- Curate and preprocess real-world medical datasets, including OpenFDA and ICD-11, the latter of which was programmatically extracted and manually refined through custom API scripting.
- Enhance inference and data retrieval performance by integrating customized knowledge bases, resulting in a **30%** boost in retrieval speed for downstream applications.

Computer Science Faculty

Bharatiya Vidya Bhavan 🛮

February 2025 - May 2025

- Instructing BBA students in foundational computer science subjects, including Graphics Design, SQL, and Image Processing, with a focus on both theoretical concepts and practical applications.
- Leading lab sessions for a class of 39 students, providing hands-on experience and personalized support to enhance their technical skills.
- Grading assignments, projects, and exams, offering constructive feedback to improve student performance and understanding.
- Developing engaging lesson plans and course materials tailored to the needs of diverse learners, fostering an interactive and inclusive classroom environment.

Machine Learning Engineer | Graduate Engineer

PTS Consulting Services 2

August 2023 | Kolkata, India

 Optimized deep learning workflows by implementing the VGG16 model, improving IDPUI project comparison accuracy by 15%.

🖒 CORE SKILLS

- Programming: Python, Java, JavaScript (React.js, Angular),
 C++, C, Flutter
- Machine Learning: Deep Neural Networks, PyTorch, TensorFlow, Stable Diffusion, Computer Vision
- Cloud Platforms: AWS, Azure, Google Cloud
- Databases & APIs: MySQL, PostgreSQL, Firebase, SQLite, REST APIs, JSON, XML
- Web Development: Node.js (Express.js), HTML, CSS, PHP
- Other Tools: Git (CI/CD Pipelines), Bitbucket, Unix, Shell Programming, Computer Architecture, Operating Systems, MS Office

EDUCATION

Masters in Computer Applications

Amity University Kolkata 🛮

September 2021 – June 2023 | Kolkata, India

8.28 CGPA

Roles: Class Representative, Event Manager

Bachelors in Computer Applications

Amity University Kolkata 🛮

2018 - 2021 | Kolkata, India

8.21 CGPA

Roles: Class Representative, IT Club Admin

1 TOP CERTIFICATES

- AWS Computer Vision: Getting Started with GluonCV @
- Getting Started with AWS Machine Learning
- Microsoft Certified: Data Analyst Associate with Power BI
- Google Cloud Platform Fundamentals for AWS Professionals
- Industrial IoT on Google Cloud Platform 🛮

PROJECTS

Al Job Assistant

November 2023 - present

- Developed a full-stack AI solution utilizing OpenAI's API with a custom knowledge base, enhancing data retrieval efficiency by 30%.
- Engineered both front-end and back-end systems, ensuring scalable and robust performance.

- Designed and deployed a secure Single Sign-On (SSO) system with Okta, enhancing authentication speed and user experience for the Yuji App.
- Spearheaded UI development for KoyoX, an AI job assistant, ensuring seamless integration with OpenAI APIs to deliver tailored job recommendations.
- Independently developed the full-stack architecture for an AI
 Job Assistant, integrating a custom knowledge base to
 increase data retrieval efficiency by 30%.
- Conducted code reviews and implemented scalable solutions to reduce deployment time by 25%.

Web Developer Intern

Travarsa Private Limited 🛮

July 2022 - August 2022 | Kolkata, India

- Delivered a full-stack website for MediFitServe, improving user engagement by implementing responsive design and seamless file upload functionality.
- Conducted SEO/SEM analysis, increasing site traffic by 40% through strategic keyword targeting and optimization.
- Streamlined deployment processes to custom hosting servers, reducing project completion time by 20%.

Web Designer and Digital Marketing Analyst

Travarsa Private Limited 🛮

April 2020 - June 2020 | Kolkata, India

- Engineered a user-centric full-stack website for Guide Me Wide, incorporating dynamic pop-ups and file upload capabilities, boosting user retention by 25%.
- Designed and executed digital marketing campaigns, resulting in a 50% improvement in search engine rankings.
- Automated deployment workflows to custom servers, enhancing site performance and accessibility.

B PUBLICATIONS

Machine Learning (ML) and Blockchain for IoE: A Deep Insight into Framework, Security, and its Applications with Industrial IoE

Routledge - Taylor & Francis Group 29th September 2023

Deep Learning for COVID-19 2

Springer International Publishing

Development on Risk based Information Security Standard for Adaptation of Blockchain enabled systems ☑

Springer International Publishing

Design of an IoT-Based Mobile Healthcare Unit Using a Self-Regulated React.js Database and Arduino

Apple Academic Press

KoyoX - Al Job Assistant UI Development 🗵

November 2023 - present

 Led the UI development of KoyoX, an Al-powered job assistant, ensuring seamless user experience and functional integration.

Neural-Networks-From-Scratch

January 2024 - present

- Built foundational neural networks, including derivatives, multi-layer perceptrons, and a GPT model with self-attention and a decoder-only architecture.
- Designed specialized notebooks like "NameWeave," which transitions from traditional models to neural networks, and "GPT Tokenizer," focusing on text preprocessing and tokenization.

Yujj 🛮

October 2023 - present

- Integrated Okta's Single Sign-On (SSO) for enhanced security and user authentication.
- Designed and implemented QR code generation for seamless data exchange and secure authentication processes.

Text-To-Image Generator ☑

May 2023

- Developed a GUI application for image generation from text prompts using the Stable Diffusion pipeline.
- Managed dependencies, utilized PyTorch, and integrated with HuggingFace API Token for seamless functionality.

Face Recognition Flutter

February 2021

- Built a full-stack application with **Dart** and integrated APIs like MLVision, FirebaseImage, and FlutterCamera for robust face recognition.
- Enhanced performance using GPU Delegates and employed
 PathProvider API for secure data storage.

Med-It-Yourself

June 2020 - July 2020

- Designed a native Android health app featuring both user and provider interfaces.
- Integrated third-party APIs such as Google Maps API for location-based services and Glide for efficient image handling.

W LANGUAGES

English	
Bengali	
Hindi	
German	
Spanish	