Basab Jha

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EDUCATION

Tribhuwan University Bachleors of Science in Computer Science And Information Technology

Relevant Courseworks: Data Structutres and Algorithms, Python, Database Management Systems, Discrete Mathematics, Computer Architecture, Artificial Intelligence, Theory of Computation

EXPERIENCE

xAGI

Software Development Engineer

- Developing and optimizing AI solutions, including predictive analytics, intelligent chatbots, and computer vision applications, to enhance business decision-making and customer engagement.
- Collaborating with cross-functional teams to integrate AI capabilities into client systems, ensuring seamless deployment and functionality.

⇔xagi.in

Apparatus.ai

Co-Founder & CTO

- Built and scaled an AI-driven business forecasting and modeling platform for SMEs, integrating financial risk analysis and compliance automation.
- Designed and developed custom ML models for business forecasting, anomaly detection, and predictive analytics, Managing infrastructure and API development

GApparatus.ai

Fellowship.ai

Data Science/ Machine Learning Fellow

- Building An Autonomous Web Agent using UI TARS, LoRA scripting with headless browsing and decision making capabilities
- Presented a paper on LLM based engineering agent (Agentless: Demystifying LLM based Software Engneering Agents)

⇒Fellowship.ai

KRUTRIM

Research/ML associate

- Jun 2024 Aug. 2024 Focused on data preprocessing, feature extraction, and model training using Python and TensorFlow.
- Conducted extensive data analysis to identify patterns and trends in large datasets, utilizing tools such as Pandas, NumPy, and Matplotlib
- Worked closely with senior researchers and data scientists, contributing to team meetings and presenting findings

⇔olakrutrim.com

PROGRAMMING SKILLS

Languages: Typsescript, Python, Javascript, C/C++, Rust, Julia Frameworks: Next.Js, Django, FastAPI, React, Vue.js, Node.js, jQuery Database: PostgreSQL, MySQL, mongoDB, Prisma, Supabase, Firebase, NeonDB, GraphQL, LanceDB Additional: Tensorflow, Pandas, Git, Docker, Linux, PyTorch, NixPacks, AWS,

HONORS & AWARDS

 MBMC IdeaX Hackathon Fintech Track Winner(Recognized for making Finlytic, a tax categorization and complicance app

PUBLICATIONS

- Fragile Mastery: Are Domain Specific Trade-offs Undermining on On-Device Language Models? Introduced the Fragile Mastery phenomenon and proposed Generalized Edge Model (GEM), alongside a comprehensive evaluation framework featuring Domain Specialization Index (DSI), Generalization Gap (GG) and Cross-Domain Transfer Ratio (CDTR) for measuring trade-offs in ODLMS.
- The Rosetta Paradox: Domain-Specific Performance Inversions in Large Language Models -Helps formalize the definition of the Rosetta Paradox and introduces a panoramic analysis framework that includes both a Domain Specificity Index (DSI) and a Performance Inversion Metric (PIM) for consistent quantification of domain-specific behavior in LLMs.

Kathmandu, NP Feb 2023 - Present

Feb 2025 – Present

Remote

Kathmandu, Nepal Aug 2024 – Present

Remote Jan 2025 - Mar 2025

Remote