Akash Nath

Computer Science and Engineering Bachelor of Technology Assam University, Silchar

EDUCATION

Bachelor of Technology in Computer Science and Engineering

2021-25

Assam University, Silchar

CGPA: 7.81

TECHNICAL SKILLS AND INTERESTS

Languages: C/C++, Python, bash, PHP

Frameworks and Libraries: TensorFlow, PyTorch, Keras, ReactJS, Node.js, Scikit-learn, OpenCV Cloud and Databases: AWS (EC2, EKS), Microsoft Azure, MongoDB, IBM Watson Studio Tools and Environments: Git, GitHub Actions, VSCode, Unix/Linux, Windows, macOS

Concepts: Distributed Systems, Machine Learning, Information Retrieval, TCP/IP, Web Security Areas of Interest: Artificial Intelligence, Deep Learning Models, GAN, Computer Vision, ML models

PERSONAL PROJECTS

• VINO AI

June 2023 - Sep 2023

VINO AI is an advanced AI-driven web platform designed with modern web technologies.

- Architected a highly scalable web platform powered by AI, ensuring robust performance and seamless user experience.
- Designed and deployed a distributed system to optimize data processing efficiency.
- Integrated advanced AI features like image restoration and search algorithms.
- Implemented secure data management with MongoDB, Clerk for authentication, and Stripe for payments.
- Visit

• Enhanced Plant Disease Detection System

Nov 2023 - Dec 2023

Utilizes CNN Ensemble and Gradient Boosting for Plant Disease Detection.

- Designed a CNN Ensemble utilizing architectures like AlexNet, VGG-16, and YOLO-V5 to achieve robust and accurate classification of plant diseases.
- Applied advanced data pre-processing, including image augmentation, to enhance model performance.
- Achieved 92.33% accuracy through hyper parameter tuning and cross-validation
- Tools: TensorFlow, Keras, NumPy, scikit-learn, pandas, Python.

EXPERIENCE

• Software Engineer Intern @NIT

May - Present

Hybrid

NIT, Silchar
— Spearheaded the development of advanced DevOps tools, significantly enhancing deployment efficiency.

- Architected real-time IoT data acquisition systems utilizing MongoDB, JavaScript, and Socket.IO for seamless data flow.
- Leveraged in-depth expertise in the AWS Well-Architected Framework to optimize security, performance, and cost efficiency.
- Orchestrated the integration of applications with AWS EC2 and EKS, ensuring robust and scalable infrastructure management.

• EVM Chain Analytic

Feb 2022 - Apr 2022

Solana Labs

Remote

- Achieved 30% growth for Dapps and EVM(fraud detection) using IPFS(InterPlanetary File System) for proper management of database for web3, used Infura for scalable and reliable access to Ethereum nodes and APIs, and Web3.js is used to deploy SC, DApp
- Developed EVM(Ethereum Virtual Machine) chain pattern detection and developed seamless way to track any transactional fraud and reduced 12% fraud in the chain

ACHIEVEMENTS

•CodeChef: 4* coder Verify

Global Rank: 5013Country Rank: 3962.

• Azure AI Document Intelligence Verify

- Build an Azure AI Vision solution Verify
- Microsoft Transcript Verify