Harsha Emani

MLOps Engineer

Fredericton, NB • harsha.emani987@gmail.com • + 1 (506) 440-0282

• linkedin.com/in/harsha-emani • github.com/HarshaEmani • portfolio.harsha-homelab.me

SUMMARY

Passionate, Goal-Driven Engineer and Researcher with over 5 years of experience in the industry and academia, blended with a versatile set of technical and soft skills. Demonstrated ability to work in fast-paced and dynamic environments with mission-critical systems and high reliability software solutions. Seeking for teams to collaborate with, interesting problems to solve and contribute to the collective growth.

SKILLS

Techninal & Energy-Focused: Renewable Energy Load Forecasting, Predictive Modeling, System Health Monitoring, High-Availability System Design, Automation, Proactive Risk Identification and Mitigation

Software & Systems: SDLC, Machine Learning & Deep Learning, DevOps, Software Design, Architecture and Security, Data Analysis and Visualization, SCM, Computer Networking

Programming & Tools: Python, Pandas, scikit-learn, Matplotlib, Seaborn, Keras, TensorFlow, Django, FastAPI, PostgreSQL, MongoDB, Hyperledger Fabric, ReactJS, VueJS, NextJS, NuxtJS, Linux, Docker, Kubernetes, Jenkins, GitLab, IBM Cloud, Figma, Proxmox, Windows

Soft Skills: Excellent language skills, Technical writing, Presentation skills, Motivational speaking, Collaboration, Leadership, Out-of-the-box thinking, Curiosity

WORK EXPERIENCE

Graduate Research Assistant | UNB, Fredericton, NB   **May 2024 – Aug 2024 (Full-time)**
- Engineered a high-performance **Deep Learning model** for forecasting the load demand of a Renewable Energy resource and developed a website to assess the performance and analytics for every **prediction interval**, improving **prediction accuracy** for a leading energy company.
- Orchestrated the design and development of a highly reliable and available **microservices architecture** to support similar forecasting tools built by the department.

Member Technical | Broadridge Financial Solutions, India   **Jun 2021 – Jan 2023 (Full-time)**
- Handled **End-to-End Fullstack development**, deployed **blockchain code**, built and managed containers across different environments like Dev, QA, UAT and Production.
- Worked as a **GitLab** maintainer, responsible for version control and code maintenance, code reviews, merging changes and maintaining tags for the team.
- Collaborated effectively and assumed leadership for a medium-sized team, participated in daily **scrum** calls, addressed business needs, resolved support tickets and managed change processes for a **Blockchain-based solution**.
- Contributed to winning the **NASSCOM 2021 Innovation – Excellence award** for the project.

Backend Support Engineer | Tata Consultancy Services, India   **May 2019 – Jun 2021 (Full-time)**
- **Debugged backend** issues, managed global outages, and **resolved stakeholder concerns** through clear communication and conflict resolution across **high-availability** systems in over 100 countries in both cloud and on-premise environments.

Harsha Emani

MLOps Engineer

Fredericton, NB • harsha.emani987@gmail.com • + 1 (506) 440-0282

• linkedin.com/in/harsha-emani • github.com/HarshaEmani • portfolio.harsha-homelab.me

INTERNSHIP

Developer Analyst | Mariner Partners, Fredericton, NB   **May 2023 – Dec 2023 (Full-time)**

- Responsible for end-to-end SDLC and **Fullstack web application** including auth, testing and deployment of an automated survey tool for assessing the industry readiness for companies.
- Actively contributed to a **high-stake government initiative** by leveraging the prior tool development experience to build a **secure communication platform** for ship-port interactions across Canada, ensuring safety and regulatory compliance.

EDUCATION

Master of Computer Science — Research based   **Jan 2023 – Aug 2025**

University of New Brunswick, Fredericton, NB.

- Pursued a research-based masters with a focus on **R&D** for an **MLOps based Forecasting Tool** to automate workflows for **prediction of net load demand** from renewable energy resources for small islands, with reliability, accuracy and maintainability as key attributes.
- Applied predictive modeling and system health monitoring techniques to ensure operational reliability, aligning research with real-world energy applications.

Bachelor of Technology — Information Technology   **Aug 2015 – May 2019**

Vishnu Institute of Technology, Bhimavaram, India.

PROJECTS

Forecaster Tool | Research | [URL](URL)   **2025**

- Built a versatile ML-based graphic tool to support Barbados grid operators in managing renewable energy systems and enhancing forecasting accuracy, with the flexibility to track and adapt to other energy types and grid operations.

ANN Implementation from scratch | Academic | [URL](URL)   **2024**

- Demonstrated strong research skills by building an artificial neural network from scratch using NumPy, showcasing a solid grasp of machine learning fundamentals through hands-on implementation.

ACHIEVEMENTS, VOLUNTEER WORK & SPECIAL INTERESTS

- Achieved **Azure AI Fundamentals** certification.
- Volunteered as a **Technical Assistant** for the **Graduate Student Association** of University of New Brunswick and helped them in building/updating their website with information on new events and important news.
- Built a **homelab using a bare metal** PC acting as a home server to implement a **network-wide adblocking**, a self-hosted multimedia streaming service similar to Netflix.
- Volunteered for Usher/Greeter/Cloak Room Attendant roles at the Fredericton Playhouse.
- Secured an overall score of 10 in the **CELPIP** Language Requirements Test.
- Interested in travel, learning about new cultures and being a part of the local community.

REGISTRATION / ELIGIBILITY

- In progress for Professional Engineer (PEng) registration in New Brunswick (APEGNB)