VARSHA HINDUPUR

MLaaS, SaaS, and DaaS developer with cloud expertise and
Agile, Scrum, Sprint experience

+1 857-693-9108 | Boston, MA
hindupur.v@northeastern.edu
https://www.linkedin.com/in/varsha-hindupur |
https://varshahindupur09.github.io

EDUCATION

Northeastern University | Boston, MA   *August 2024*
Master of Science in Information Systems

University of Mumbai | Mumbai, India   *May 2016*
Bachelor of Engineering in Information Technology

PROFESSIONAL EXPERIENCE

Northeastern University – Survey Platform (Software Engineer/Developer Architect)   *Boston, MA*
Full Stack Engineer, Research   *February 2024 – Present*
- Developed **scalable** and **responsive website** from scratch using React, Node.js, MongoDB (NoSQL), Express.js, and Docker
- Simulated a digital dashboard and integrated Qualtrics, collecting data from **2 million participants** for research analysis
- Enhanced data integrity and security by implementing JWT authentication in backend REST APIs with **JSON** for MongoDB
- Provisioned EBS, S3, CloudFront with **AWS CloudFormation** templates, optimizing Infrastructure as Code (**IaC**) deployment
- Designed a **CI/CD pipeline** with GitHub Actions and Docker, automated deployments and reduced deployment time by 40%
- Automated participant payment calculations via APIs, **eliminating manual intervention** and ensuring 100% accurate payouts
- Facilitated user engagement with WebSockets for **live updates** instant validation feedback and discovered **response patterns**

Novelis – An Aditya Birla Company (AI, Data Processing, Cloud Services)   *Atlanta, GA*
R&D Ecosystem Coordinator Co-op   *May 2023 – December 2023*
- Launched meeting intelligence app with voice-to-text **pipeline**, integrating **Python**, Oracle SQL database, for addressing 80% meeting queries of 100+ company users daily
- Integrated Kubernetes (K8) for **load balancing** and **GPT-3.5** model APIs to enhance query response efficiency
- Deployed application in **Azure** App Service by setting CI/CD pipeline using Azure DevOps, GitHub Actions, **Airflow** and CLI
- Built a data pipeline using Azure Data Factory to ingest **streaming** R&D project **data** into Snowflake, enabling real-time project **ROI analysis timelines**, and resource use across multiple projects for the portfolio performance team

Northeastern University – Marketing Department (HPC, AI, Analytics)   *Boston, MA*
Software Engineer, Data Science Research   *February 2023 – May 2023*
- Scrapped brand ambassador diversity data for 50+ luxury brands (1M+ records) using Python, Twitter APIs, and Selenium
- Applied model and data **parallelization** with Dask, DeepFace ML, OpenCV on HPC using **CUDA**-enabled **GPUs**, achieving 98% accuracy in **image analysis** and overcoming challenges in processing big data as well as optimizing code performance
- Developed **Flask app** integrated with Dropbox **APIs and Snowflake** for **data processing, analysis, and visualization**

UST's BlueConch Technologies – Financial Services (Machine Learning, Analytics, Backend).   *Pune, India*
Senior Quality Assurance – Automation   *December 2020 – August 2022*
- Designed **backend services** via **Python** - Celery, Dramatiq, Pedantic, **CI/CD with Jenkins** to surge deployment speed by 20%
- Crafted **algorithms** for credit risk assessments via hash maps, binary search trees to get customer payment data retrieval
- Led migration to **Redis** for high-risk account processing to improve data access speeds and lower processing time by 2 days
- Engineered **asynchronous APIs** (message queuing) with XML responses, enhanced real-time data exchange for 50,000 users
- Executed **XGBoost models** to classify credit risk, boosted accuracy and reduced high-risk account processing time by 30%

TECHNICAL SKILLS

- **Languages/Database:** Python, JavaScript, Bash, TypeScript, HTML, CSS, GraphQL, MySQL, NoSQL, PostgreSQL, Firebase
- **Frameworks:** React.js (Shadcn, Tailwind), Flask, FastAPI, gRPC, Express.js, Node.js, Next.js, PyTest, Pydantic, Poetry, Celery
- **Tools:** Docker, Git, Postman, Redis, Jenkins, Bitbucket, RabbitMQ, Kafka, Airflow, Kubernetes, Nginx, Terraform, Swagger
- **Cloud:** AWS (ElasticSearch, SageMaker, DynamoDB), Azure OpenAI Studio, GCP (BigQuery, Vertex AI, AutoML), Kubernetes K8

PROJECT EXPERIENCE

Microservices Architecture with Python, Django, Flask, RabbitMQ, and Docker   *July 2024*
- Created Flask and Django apps for user likes and admin post tracking, integrated RabbitMQ for real-time event communication

CERTIFICATES

Microsoft Azure Fundamentals (AZ-900)   *February 2024*
Architecting Solutions on AWS (Coursera)   *January 2024*