#### VARSHA HINDUPUR

(857)-693-9108 | hindupur.v@northeastern.edu | linkedin.com/in/varsha-hindupur-4aaa83175 | (website) varshahindupur09.github.io

#### **EDUCATION**

#### Northeastern University

Sep 2022 - July 2024

Master of Science in Information Systems, ML Engineering & Data Science

Boston, MA

Courses: Big Data Intelligent Analytics, Adv. Data Science, Gen. AI, High Parallel Computing AI ML, App Dev. & Engineering

University of Mumbai

May 2012 - May 2016

Bachelor of Engineer in Information Technology

Mumbai, India

#### TECHNICAL EXPERTISE

Programming: Python, SQL, DBT, Spark, Java (SpringBoot), R, C/C++, JavaScript (React, Angular, Node), Perl, Scala, Julia AI, ML & Data Science: Deep Learning, Regression & Classification, LLM, Hugging Face, NLP, LLM, Scikit-Learn, AutoML, Tensorflow, Keras, PyTorch, SAS, Hadoop, Hive, FlaskAPI, FastAPI, Terraform, Teradata, Selenium, CUDA, A/B Testing Cloud: AWS, Azure, Kafka, GitHub Actions, Docker, Snowflake, Databricks, Airflow, Astronomer, Kubernetes, Blockchain Certification: MS Azure Fundamentals AZ-900 (Feb 2020), IBM Coursera Data Science SpaceX Data Project (Jan 2024) Publication: Data Transfer Through Human Body (Jan 2016)

Extra-Curricular: Technical Expert at NEU Blockchain Student Organization

Dec 2023 - Present

#### WORKS EXPERIENCE

### Data Analysis Co-Op

May 2023 - Dec 2023

Novelis - An Aditya Birla Company | Tech Stack: Power BI, Salesforce, LLM, Arize, Azure MLOps

- □ Accomplished data analysis strategies by utilizing Salesforce & Power BI reporting elevating operational efficiency by 90% ☐ Built & analyzed 15 KPIs like budget, project completion, IP generation in Snowflake to optimize projects & foster invention
- □ Built Azure MLOps pipeline via DevOps, App Service, Docker, GitHub Actions, CLI; cutting models rollout time to 30 mins
- □ Crafted "EagleGPT" on top of ChatGPT, by improving conversational AI dialogues, model responses, & backend system
- □ Extra-Efforts: Built & integrated 51.47% (35 out of 68) web-app modules React, FastAPI, PostgreSQL, Alembic, Postman

#### Graduate Research Assistant (Machine Learning)

Feb 2023 - May 2023

Northeastern University | Tech Stack: Computer Vision, Image Analysis, DeepFace Model, AWS Sagemaker

Boston, MA

□ Conducted image feature engineering via OpenCV, Keras computing 20 attributes in 30 secs for each 1000+ records leveraging NEU's Discovery (High Performance Parallel Computing VM) surging performance (speed & time) by 80% □ Executed Deepface model on AWS SageMaker; got 25% boost in precision, F1 score for Marketing Research Academia

**Data Engineer** Dec 2020 - Aug 2022

UST Global (Xpanxion) | Tech Stack: GCP, AWS, Databricks, Hadoop, Teradata, Snowflake, Collibra, Salesforce Pune India

- □ Constructed ETL pipeline using Kafka, NiFi, Snowflake; elevated data influx 25x, trimmed daily execution time by 4 hours □ Designed APIs to integrate Collibra & Salesforce data via Databricks; optimized data processing for reuse in 3 projects
- □ Overhauled Hadoop data prep, achieved 20% surge, cut creation time from 12 to 1 hour, with tuned ETL jobs in Teradata
- □ Migrated ETL pipeline to AWS Glue, Redshift, Lambda, Step Functions, Terraform for credit reporting agency client
- □ Enhanced time series forecasting by 30% with GCP's TensorFlow & AutoML, optimizing hyperparameters & A/B testing

## Senior Software Engineer Analyst

Mar 2019 - Dec 2020

Accenture | Tech Stack: ETL, Restful APIs, AWS (EMR, S3, Redshift), PySpark, SQL, Stored Procedures, UI/UX Mumbai India □ Led creation of in-house library via React, Python for reusable modules & saving 80+ monthly hours for pharma client

- □ Produced 100+ PySpark reports, attained 75% reporting efficacy with queries, views, stored procedures, windows functions
- □ Configured ETL Pipeline using AWS EMR, S3, Redshift achieving 30% reduction in data processing time in 3 weeks
- ☐ Mentored 5 junior team members in sharing coding practices, KTs in system architecture, code reviews, problem-solving

**System Engineer** Mar 2017 - Mar 2019

- Infosys | Tech Stack: Java (SpringBoot), React, JavaScript, HTML, CSS, Automation Testing, NoSQL, GraphQL Pune. India
- ☐ Enhanced banking client agile project by building Spring Boot microservices, React UI using MongoDB & GraphQL □ Built testing framework with 30+ distinct cases using Java, Selenium, TestNG, Karate, RestAssured for CI/CD pipeline

#### **Business Intelligence Intern**

Nov 2016 - Jan 2017

Rendered Ideas | Tech Stack: Sentimental Analysis, Microsoft Excel, SAS, ELT (Extract Load Transform)

Mumbai, India

□ Revamped player engagement analysis using SAS, reducing ELT time by 8 hours, achieving 10% revenue growth

□ Optimized sentimental analysis by dataset construction via feedbacks, creating 10x surge in game downloads worldwide

### ACADEMIC PROJECTS

# Aircast - Air Quality Forecasting | ML | MLOps Engineering | Data Augmentation | MVP Architecture

Apr 2023

□ Crafted Streamlit app, orchestrating **DaaS** with Amazon S3 and **RDS**; informed Air Quality forecasting via **Hugging Face** LSTM model with RMSE: 0.8 in EC2, integrating ML-as-a-Service (MLaaS) using FastAPI, Airflow, Nginx, Docker, Kubernetes, PostgreSQL, CloudWatch, leveraged the Great Expectations Tool for data quality validation

Ride Fare Prediction(Uber/Lyft) | Machine Learning | Exploratory Data Analysis (EDA) | Data Modeling

Mar 2023

□ Predicted price using Linear Regression, Decision Tree, Gradient Boosting Regressor models - & Folium to analyze factors such as weather, ride choices, distance; achieved high accuracy via MAE, MSE, RMAE values closer to 1

Meeting Intelligence App | Data Engineering | Data-as-a-Service (DaaS) | ChatGPT 3.5, Whisper, Dall-E

Feb 2023

□ Crafted voice-to-text-image pipeline, transcribed audios & videos to text & images by OpenAI APIs with query responses

#### **HONORS & AWARDS**

Promotion to Senior SDE at Accenture (Mar 2020); Pat on the Back Award at UST-Xpanxion (Jan 2022)