Vishnu Ghosh

NY | +1 (716) 994-7390 | vishnughosh.usa@gmail.com | www.linkedin.com/in/vishnugh
| https://github.com/vishnugh | https://www.vishnughosh.com/

Education

University at Buffalo, The State University of New York   **3.96 GPA**
- MS, Engineering Science in Data Science: Top 1% of the graduating class
- Machine Learning using R and Python, Reinforcement Learning, Query Language, Probability   Sept 2021 - Feb 2023

Visveshwaraiah Technical University (VTU)   **73.78 %**
Bachelor of Engineering, Electrical and Electronics   Aug 2010 - May 2014

Professional Work Experience

Java Developer, Infinite Computer Solutions, Atlanta   Feb 2023 – Present
- Developed Java code to retrieve data from diverse sources, including RESTful APIs and Oracle SQL databases.
- Developed and maintained ETL processes using Informatica PowerCenter, ensuring the seamless extraction, transformation, and loading of large volumes of healthcare data from various sources into a data warehouse for analysis.
- Wrote Shell scripts to update the metadata of each job run in DB.

Software Engineer, Make My Trip, India   Sept 2019 – Aug 2021
- Developed React web applications, meticulously managing every phase of the development life cycle.
- Improved the Home Page Web Performance by 100% (from ~40% to ~80% Google Lighthouse score).
- Assisted in Search Engine Optimization by making CRON jobs using Python Airflow framework which improved the ranking to 2nd in Google Search Results.
- Collaborated with the product team on new features and implemented AB testing on new releases.
- Deployed Mobile Application features using React Native.

Unity3D Developer, Entropy Box, India   Sept 2017– June 2019
- Developed and published Games in iOS as well as Google PlayStore with over 10,000 Downloads.
- Integrated APIs like Facebook Analytics, Ads networks (Admob & unity ads), In-app purchase packages, GameAnalytics & Unity Analytics.

Software Engineer, Tech Mahindra Pvt Ltd.   Nov 2014 – Sept 2017
- Developed Java Applications using Spring and Hibernate.
- Implemented PCI-DSS (security standard), which made the Payment Application more secure and compliant with the latest security standards.
- Designed databases in ORACLE by creating packages, relational tables, stored procedures and integrating them in the application.
- Automated tasks for testing and test data generation using Selenium automation.

Projects

GeneNet
- Created web application tools in Django, Python to analyze Human gene expression by creating network graphs to visualize and study impacts of each gene.. Helps in analyzing, searching large amounts of gene data in text format (>15 GBs) from different sources and visualizing it fast. Used Pandas and scikit-learn to calculate the inference

Reinforcement Learning Autopilot Agent Learning to Take-off
- Created RL Autopilot Agent Learning to take-off using real simulation of Airbus A320.
- Implemented Double Deep Q-Network (Double DQN) using PyTorch as the RL method for training.
- Demo - https://youtu.be/8MfMkVNCZBY

Probability Visualizer
- A React Web Application for simulating and viewing various Probability Distributions. (Demo - https://math.vishnughosh.com/)

AR Cabin
- An Augmented Reality App which scans and measures a bag using AR Library and identify if it will be allowed as a cabin luggage. Demo- https://www.youtube.com/shorts/oLMtveSEST8

evo-NEAT
- A Java implementation of NEAT(NeuroEvolution of Augmenting Topologies) for the generation of evolving artificial neural networks. The neural network was implemented from scratch.
- This project was added to Github's **Arctic Code Vault** and was awarded "Arctic Code Vault Contributor" badge and "Starstruck" badge in Github (https://github.com/vishnugh/evo-NEAT).

Skills

- **Programming Languages:** Java, Python, SQL, R, Shell, Unix/Linux, postgres
- **Tools :** Docker, Git, Informatica Powercenter, Pandas, PyTorch, Scikit-Learn, R Shiny, Plotly, Agile
- **Web Development:** ReactJS, JavaScript, HTML