RISHABH BHATT

Email: rishabhbhatt.app@gmail.com | Portfolio | LinkedIn | GitHub

SKILLS

Languages : Python | SQL | C++ | C
Tools : Git | Jira | AWS | Linux | MySQL | Docker | Apache Spark | Hugging Face | Tableau | Adv. MS Excel
Domains : OOP | Big Data Analytics | Data Mining | Machine Learning | Deep Learning | MLOps | Computer Vision | NLP
Libraries : Scikit-Learn | Pandas | Matplotlib | NumPy | PyTorch | TensorFlow | Transformers | SpaCy | Dash | OpenCV

EDUCATION

Pennsylvania State University
University Park, PA, USA
Graduating May 2023

- Master of Science in Computer Science & Engineering | **CGPA: 3.63/4.0**
- ***Graduate teaching and research assistant*** for Deep Learning for NLP with *full tuition waiver*
- Coursework: Data Mining, Neuro Symbolic Learning, Large Scale ML, Computer Vision, Cloud Computing

Vellore Institute of Technology
Vellore, TN, India
2015-2019

- Bachelor of Technology in Computer Science with spl. in Bioinformatics | **CGPA: 8.23/10.0**
- Coursework: OOP, Data Structure & Algorithm, Software Design & Development, Operating System

WORK EXPERIENCE

ZS Associates (Illinois based consulting firm)
Decision Analytics Associate | Oncology Analytics Team
Pune, MH, India
2019-2021

- Delivered successful business strategies for **fortune 500** healthcare companies by leveraging data, **arbitrating discussions**, and providing insights via **business dashboards** to identify Key-Performance-Indicators **(KPIs)** & unlock business value
- Developed **statistical models** in **Python** to analyze *longitudinal data* with over **2 million** records/year, uncovering market trends & predicting product growth potential, which helped clients optimize their sales force & marketing strategies
- Analyzed *sales data* in a **$265B** Oncology-Market using **AWS technologies** (EC2, S3, SageMaker, Redshift), resulting in **>10%** revenue increase & cost savings through efficient **data ingestion** & **ML pipeline integration** into client workflows
- Clustered over **500k** customers using **unsupervised learning** algorithms, revealing market segments & customer behavior patterns, resulting in better customer experience & improved client reach through targeted messaging.
- Strengthened client relationships by collaborating with client teams, effectively communicating findings, & delivering results

Velankani Electronics (Bengaluru based IT services firm)
Data Science Intern
Bengaluru, KA, India
2018

- Developed a **license plate recognition system** using convoluted neural networks (**CNNs**), saving over 10 man-hours per day by automating the tracking of thousands of vehicles through security cameras.

ACADEMIC PROJECTS & RESEARCH

Projects

- **Multi-modal Task-Oriented Assistant**, Amazon Task-Bot Challenge 2023 | **EvoquerBOT**, a conversation agent which uses *Large-Language-Models* grounded by domain specific *Knowledge-Graphs* to help guide users through complex real-world tasks
- **Gesture Recognition via skeleton based Deep Neural Network |** Developed a Long Short-Term Memory (LSTM) network on PyTorch that uses skeletal graph data from over ***21k videos (~5Gbs)*** to learn and classify dynamic hand gestures
- **Atari Game Bots using Reinforcement Learning (RL) |** Ran game simulations using reinforcement learning agents trained on *Deep-Q-Learning (DQN)* & *Proximal-Policy-Optimization (PPO)* algorithms, to analyze performance and improve game play
- **Analyzing Social Sentiments using scraped tweets |** Scraped over ***1.2 million tweets*** using Python to train a Random Forest Classifier, and used the predictions to analyze public perception for "Lok Sabha Elections in India"
- **3D Human Skeleton for Augmented Reality |** Projected joint locations from real world to 2D pixel coordinates & used these 2D estimations to reconstruct a 3D human skeleton across **~70,000 frames** of joint data from a dual camera setup

Publications

- **"Indian Sign Language Recognition System using Adaptable Segmentation & ML"** - Rishabh Bhatt & Dr. Vishal Bharti
  Published: GRENZE International Journal of Engineering & Technology, 2020 Vol-6 Issue-1 (ISSN: 2395-5295), pages 27-36
- **"Cyberbullying & the need to reform cyber laws in India: The Venus Fly Trap Analogy"** - Rishabh Bhatt
  Published: OIIRJ Volume-09, July 2019 Special Issue (ISSN: 2249-9598), pages 289-297

IBM DS Professional Certification | AWS Machine Learning | ML Stanford University | Emotional Intelligence NPTEL