

Varshil Shah

Computer Science Grad & AI Enthusiast

varshilshah0203@gmail.com | [LinkedIn](#) | 602-517-2465 | github.com/varshil1

EDUCATION

Arizona State University

Master of Computer Science (MCS)

Tempe, AZ

Expected Graduation: May 2025

Ahmedabad University

Bachelor of Technology in Information and Communication Technology (ICT), (GPA: 3.21/4.00)

Ahmedabad, India

May 2022

WORK EXPERIENCE

Anicca Data Science Solutions

Data Engineer

Bellevue, WA

August 2022 - July 2023

- Orchestrated design and execution of high-performance data pipelines using AWS Glue and PySpark, processing 100K to Millions of rows of data implementing statistical techniques, including Time Series Analysis and Statistics, and leveraging mathematical software for unsupervised learning to adapt to evolving project requirements.
- Collaborated with cross-functional teams employing Agile Methodologies and build tools to create efficient Big data solutions on Amazon AWS EC2, S3, Apache Airflow DAGs, and Redshift, reducing data processing time and saving \$20,000 monthly.
- Optimized data engineering processes, achieving 70% reduction in processing time. Profiling, modeling, analysis, error handling and partitioning strategies enhanced database performance safeguarding data integrity and user privacy.
- Engineered a successful data infrastructure migration from on-premises to cloud-based solutions, driving down operational costs and amplifying flexibility. Pioneered the planning of an AWS-based CI/CD system, streamlining deployment and testing processes.

Pedals Up Innovation LLP

Artificial Intelligence Intern

Ahmedabad, India

December 2021 - June 2022

- Developed an animated website pedalsup.com powered by Three.js. Integrated a cutting-edge voice assistant incorporating NLP and AWS with a passion for innovation. Resulted in a 20% surge in website traffic and an impressive 15% boost in user engagement.
- Spearheaded research, design, and creation of No-Code-AI SaaS platform, Pedals up Studio, harnessing natural language understanding algorithms. Accelerated easy integration of multiple chatbots on client websites, reducing deployment time by 80%.
- Acquired an exponential 10% increase in customer satisfaction, showcasing effective resolve in enhancing business partner's communicating adoption facilitated by streamlined chatbot deployment and elimination of scripting requirements.

ConnectFor

NLP Tech (AI) Intern

Mumbai, India

August 2020 - May 2021

- Constructed a customizable chatbot aided by NLP and deep learning techniques, including analytical models, leveraging Artificial Neural Networks (ANN) and Pytorch filtering intents with an accuracy of 92%.
- Guided seamless chatbot integration on WhatsApp via WhatsApp API and Twilio. Resulted in direct user access, boosting engagement and slashing support response time by 25%.

RESEARCH EXPERIENCE

Performance Comparison of Deep Neural Networks for classification of Indian Coins

IEEE Xplore

- Designed and executed a machine vision model to precisely classify Indian coin denominations from cellphone camera images, achieving a 97% accuracy and streamlining coin segmentation systems.
- Analyzed and compared 10+ deep neural CNN network architectures including ResNet, AlexNet, GoogleNet, Inception, and VGG16 to identify optimal classification model.

PROJECTS

Social distancing detector using OpenCV

Python, Deep Learning, Computer Vision, Flask

- Developed computer vision software with prediction capabilities to detect social distancing violations through CCTV cameras, crucial for curbing spread of COVID-19. Employed YOLO model and OpenCV for object detection to identify individuals in video frames attaining 98% accuracy.

Algorithmic paper trading using Deep Reinforcement Learning

Python, FinRL

- Automated real-time creation of trading strategies for stocks such as DOW 30, using Proximal Policy Gradient (PPO) algorithm, for enhanced forecasting to optimize profits.
- Deployed resultant strategy via ALPACA finance API, enabling portfolio performance tracking and accomplishing an impressive portfolio value of \$1,034,450.54 from an initial \$1,000,000 investment during paper trading testing.

TECHNICAL SKILLS

Programming languages: Python, R, Java, C, C++, HTML/CSS, JavaScript, SQL, MATLAB

Technologies/Frameworks: Linux, GitHub, PostgreSQL, MongoDB, Pytorch, TensorFlow, Selenium, Pandas, NumPy, OpenCV

Developer Tools: VS Code, AWS, Azure, Tableau, PowerBI, Apache Kafka, Apache Spark, Hive, Docker, Hadoop, Kubernetes, SAS

CERTIFICATIONS

- Machine Learning by IBM
- Deep Learning Specialization
- Become a Data analyst specialization
- Spark AR by FACEBOOK