BHAVYA KHILRANI

bhavyakhilrani@gmail.com | +1 (716) 573-6901|
Linkedin: https://www.linkedin.com/in/bhavya-khilrani-2b6665188/

EDUCATION

State University of New York at Buffalo, New York, United States **August 2024 – Present**
Master of Science in Engineering Science (Data Science)
Indira Gandhi Delhi Technical University for Women, Delhi, India **August 2018 – July 2022**
Secured a Bachelor of Mechanical and Automation Engineering, 7.5 CGPA

PROFESSIONAL EXPERIENCE

Deloitte Consulting USI, Bengaluru, India **September 2022 – Present**
Data Analyst – Strategy and Analytics

- Achieved seamless client support by managing client interactions, gathering requirements, and constructing 10+ Oracle BI publisher reports and data models by leveraging SQL Expertise
- Led the development and implementation of critical, high-visibility reports, including checks and invoicing, which played a pivotal role in ensuring accurate financial transactions and meeting business priorities
- Automated three data loading processes, leveraging JavaScript and REST API to achieve 75% faster data loading into ERP, streamlining operations remarkably
- Contributed to the Firm initiative by consolidating archives and documentation into a centralized directory for the business line, enabling other projects to leverage existing reports and enhance operational efficiency

Amazon, Gurgaon, India **January 2022 – July 2022**
Operations Manager Intern – Customer Returns
Optimized salability rates of returned items

- Developed SQL-powered Power BI dashboards to track salability metrics such as relo-rate and reprints to facilitate weekly business reviews (WBRs) through in-depth analysis of weekly data
- Integrated multiple sources of raw yield data with Pandas and transformed it into user-interactive reports using MySQL for stakeholders' consumption
- Benchmarked data by employing dashboards to identify patterns that help detect anomalies and rectify process flow gaps, leading to a significant increase in salability rates from 48% to 52%
- Systematized team's daily shifts by efficiently allocating resources and efforts, and initiated capacity planning to meet the forecasted changes

ACADEMIC PROJECTS

Predictive Health Monitoring of Hydraulic Actuators using sensor technology and ML algorithms
Technologies: Python, Data Engineering, Data Preparation, Machine Learning, and Model Tuning

- Devised a predictive system for assessing the health of hydraulic fluids by analyzing sensor data, aiming to anticipate failure risks
- Utilized historical data to design, train, and evaluate a machine learning model, optimizing it to make real-time predictions of equipment failures
- Concluded that Random Forest was this dataset's most effective classification algorithm with 92% accuracy, 87% precision, and 89% recall
- Achieved practical integration of IoT technology with ML classification models by performing real-time analysis

Object Location and Sorting in Virtual Environment

- Designed a neural network with back-propagation capabilities to identify and locate objects accurately
- Simulated a mobile robotic arm in a virtual environment utilizing R-CNN for precise object location and categorization
- Designed the neural network architecture in Pytorch and built the feature engine for the model using PostGreSQL and Pandas for data manipulation

TECHNICAL SKILLS

- Programming languages: Python, MATLAB, SQL
- Simulation Tools: ANSYS, SolidWorks
- Big Data frameworks: Apache Hadoop, Spark, Hive, Kafka, PostGreSQL, MySQL, PostGIS
- Machine Learning Frameworks/Packager: Pytorch, TensorFlow, scikit-learn, Pandas, NumPy
- ML Techniques: Classification algorithms, Deep Learning, Computer Vision

EXTRACURRICULAR ACTIVITIES/ACHIEVEMENTS

- Served as the Technical Head, AI Club, and IGDTUW. Helped facilitate 20 events to increase student's proficiency in Artificial intelligence and related topics 2019 - 2021
- Volunteered at GIFT-Girls Innovate for Tomorrow, NASSCOM. Proliferated technological knowledge among underprivileged girls 2019 - 2020
- Chaired as the Co-founder and Vice President, Greensphere Club, IGDTUW. Led environmental initiatives, including workshops on eco-friendly menstrual products in collaboration with WWF India, positively impacting 3000 young women in one-year 2018 - 2020
- Secured a top-10 position in the final Data Structures and Algorithms (DSA) assessment at Coding Blocks May 2019