JASKARAN SINGH LUTHRA

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TECHNICAL SKILLS

- **Programming Skills**: Python (Advance), C, C++, Spark, Bash
- **Data Science and Machine Learning**: TensorFlow, Keras, PyTorch, Big Data, OpenCV, NLP (NLTK, Word2Vec, BERT, Spacy), Deep Learning, Neural Networks, LSTM, Data Mining, Data Cleaning, Transformers, Autoencoders, Statistical Analysis
- **Visualization Tools**: TABLEAU, PowerBI, Matplotlib, Seaborn, Plotly, Panel
- **Databases**: MySQL, MongoDB, PostgreSQL, MS-SQL, AWS-S3, PL/SQL
- **Frameworks Tools**: Apache Spark, Hadoop, Django, Flask, Streamlit, CI/CD pipe, REST API, Docker, Kubernetes, Selenium
  Other Tools/Methodologies: GIT, Postman, JIRA, Slack, MS Office 365, Google Suite, Scrum, Agile, AWS, AZURE

EDUCATION

Master of Applied Computing - Artificial Intelligence Stream Sep 2022 - Present
University of Windsor, Windsor, ON **CGPA: 3.7/4.0**

- **Achievement:** in Advanced Software Engineering subject by achieving a **perfect score of 100% among 160 students**

Bachelor of Technology - Information Technology **Sep 2017 - Jul 2021**
Galgotias College of Engineering and Technology, Greater Noida, UP, India **CGPA: 3.0/4.0**

PROFESSIONAL EXPERIENCE

Associate Consultant and Project Engineer Aug 2021 - Aug 2022
Wipro Limited, Bengaluru, India **Applied Technologies**: Python, MySQL, NLP, Matplotlib,SAP(BASIS,Analytics, iRPA)

- Designed frameworks, including a Resume Parser, to optimize application tracking systems and improve efficiency
- Developed an internal portal that utilized data analysis of employee skillsets to identify skill gaps and recommend targeted training programs, resulting in a 25% increase in employee productivity
- Automated repetitive tasks for Human Resource teams using SAP iRPA, reducing hiring time by 40% and workload by 50%, while also creating intuitive dashboards and delivering presentations with strong storytelling skills

Machine Learning Intern Jan 2020 - Oct 2020
Perspectico, New Delhi, India **Applied Technologies**: Python, Machine Learning, Flask, NLP (Word2Vec, Spacy, TF-IDF), APIs, AWS

- **Goal:** To develop a Recommender System for suggesting top candidates to the employer for a specific job posting
- Spearheaded a team of 5 members in acquiring 90% of the data through web scraping from job-sourcing platforms
- **Result**: 40% decrease in hiring time through Recommender System proposing candidates with 70% keyword match rate

Data Science and Machine Learning Intern Apr 2019 - Dec 2019
AutoMotu, New Delhi, India **Applied Technologies**: Data Analysis and Wrangling,Time Series Forecasting, APIs, Flask, Python

- **Goal**: To analyze driver behaviourusing mobile phone sensors and develop an ML model to predict rash driving
- Implemented a pre-processing pipeline to optimize data ingestion, resulting in a 20% decrease in data processing time
- Used Time Series Forecasting to analyze sensor data with time to detect sharp turns and overspeeding
- **Result**:Achieved 86% testing accuracy rate in driver behaviour analysis using mobile phone sensors predicting rash driving

PROJECTS

Change Data Capture (CDC) (Individual Project) Mar 2023 – Apr 2023

- **Applied Technologies**: Python, Apache Spark, MySQL, AWS (LAMBDA GLUE, S3, DMS, RDS, IAM)
- Implemented a change data capture system for replicating ongoing database changes to another storage
- Contributed to the development of the CDC system by designing a detailed architecture encompassing data flow, data transformation, and data storage, ensuring scalability, flexibility, and robustness

Automated Garage System (Team Project) (**Award Winning Project**) Sep 2022 – Dec 2022

- **Applied Technologies**: Python, Flask APIs, Unity, Junit, GIT, Jira, Flutter, GO Visual Studio, Azure Cloud
- Created an automated garage system for the first-semester academic project that allows users to monitor and control the garage system remotely from mobile devices, reducing user effort by 90%
- Delivered a total of 3 APIs for different functionalities of the app, specifically for controlling doors, sensors, and lights

Visually-Impaired Assistive Tech (Individual Project**)** Dec 2019 – Mar 2020

- **Applied Technologies**: Deep Learning, Raspberry Pi, GUI - Tkinter, API, Flask, object detection and recognition
- Built assistive technology for the visually impaired, utilizing a text-to-speech module to accurately detect and recognize objects (with 95% model accuracy) and then converts the recognized text into speech for accessibility
- Integrated eyeglasses with Raspberry Pi and Bluetooth earphones and trained/tested a TF Lite and OpenCV model on Pi