Yuvraj Singh

Toronto | Yuvraj.Singh2@georgebrown.ca | 905-587-1376
linkedin.com/in/YuvrajSingh2 | github.com/BYZANTINE26 | yuvrajsingh.dev

Objective

Avid tech enthusiast with an interest in computer vision and deep learning, detail-oriented, possessing creative and critical thinking skills, and the ability to work under pressure and meet deadlines. Experience developing and deploying on AWS cloud, real-time projects using deep learning algorithms like transformer, BERT, agentformer networks. Proficient in coding in Python, C++ and writing SQL queries. Seeking the opportunity of Machine Learning Engineer role. Excited to push technology boundaries and redefine the state of the art for control and system simulation. Skilled in developing and deploying cloud-based data models and working with embedded systems to bring cloud-based data models to run on embedded systems.

Highlights of Qualification

- Skilled in python data manipulation as well as with python libraries such as NumPy, SciPy and Pandas for data analysis.
- Proficient in machine learning and deep learning techniques for multiple applications including Computer Vision, Recommendation Systems, Natural Language Processing, Time Series Forecasting.
- Extensive hands-on experience and high proficiency handling data, using a broad range of data science tools and big data tools including Python, Spark, SQL, Hadoop, AWS, Docker.
- 3+ years of experienced in algorithm design and development for machine learning models using TensorFlow, Pytorch, OpenCV, Seaborn, SciPy, matplotlib, sci-kit-learn, NLTK, Spacy in Python.
- I have experience in vehicle and system development, including algorithm design and implementation, software architecture, integration, testing, and collaboration with low voltage electrical teams.
- Experienced in developing statistical models for analyzing and interpreting complex data sets and building data pipelines to streamline the data processing and analysis workflow, ensuring data quality and consistency.

Technical Skills

Programming: Python, C++, bash scripting, MySQL
Machine Learning libraries: TensorFlow, Keras, Pytorch, OpenCV, Pandas, NumPy, Scikit-learn, Scikit.
NLP libraries: Hugging face, NLTK, Spacy.
Others: Hadoop, Spark, Kafka, Hive, Sqoop, MongoDB, SQL, Elasticsearch, Docker, AWS, Databricks, Raspberry Pi

Academics

Applied A.I. Solutions Development, GPA – 3.53
George Brown College, Toronto, ON   Ongoing (Sept 2022 - Aug 2023)

Big Data Analytics, GPA – 3.3 (Dean's list)
Georgian College, Barrie, ON   (Jan 2022 - Aug 2022)

B.Sc. in Computer Science, GPA – 3.4
University of Delhi, Delhi, India   (Aug 2018 - Jun 2021)

Experiences

Machine Learning Engineer   (July 2021- Feb 2022)
Freelancer, San Jose, USA

- Developed on predicting future trajectories for autonomous vehicles on a highway.
- Implemented word embedding techniques to project the time series input onto a higher dimension.
- Developed various scripts using pytorch to filter data and generate features for trajectory estimation networks.
- Experimented with a transformer, BERT and multi-staged Agentformer model and simulated using ROS.

Flutter App Developer   (Jun 2020 - Sept 2020)
ISKCON foundation, Bangalore, India

- Collaborated with the team to develop Quiz and Instagram story like features for the folk application.
- Implemented State management using Getx, firebase authentication.
- Linked application with firestore database for real-time changes for all users.
- Conducted software unit testing to ensure application functionality and stability.

Projects

Sentiment Analysis for movie reviews
- Analyzing sentiment in movie review from IMDB movie review dataset using transformer network.
- Used BERT architecture and word tokenizer to improve results.
- Embedded the words on a 16-dimensional vector space.

Vehicle number plate and Owner Identification
- Detecting vehicle number plates from a video stream and using OCR to get the characters.
- Used OpenCV and skimage for extracting number plates and adding contours.
- Fetching the owner details with the help of RTO API.