Amandeep Rathee

Data Scientist • Machine Learning Specialist • Cloud Certified

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EDUCATION

Duke University

Durham, NC

Master of Science in Data Science; GPA: 3.62/4.0

Aug 2019 - May 2021

Visvesvaraya Technological University

Bangalore, India

Bachelor of Science in Computer Science; First Class with Distinction

Aug 2013 - May 2017

TECHNICAL SKILLS

- Data Analysis, Machine Learning, Deep Learning, Computer Vision, Text Analysis, Cloud Computing, Databases.
- Languages: Python, R, Java, C++, SQL.
- Frameworks: Numpy, Pandas, Scikit-Learn, Keras, TensorFlow, PyTorch, Onnx, OpenCV, NLTK, Tidyverse.
- Technologies: Git, CLI, Hadoop, Spark, AWS, GCP, Docker, Kubernetes, CI/CD, Tableau.
- Certifications: AWS Certified Cloud Practitioner, Triplebyte Certified Data Science Engineer

Relevant Experience

Data Scientist

Seattle, WA

Research AI LLC - Part-time

Aug 2020 - Present

- o Optimized trip for 20 delivery vehicles using deep reinforcement learning increasing trip efficiency by 15%.
- Automated hyperparameter tuning for machine learning using Bayesian search resulting in 30% faster convergence.
- Created explainable models in PyTorch using visualization tools that facilitated decision-making for stakeholders.

Machine Learning Intern

Morrisville, NC

LifeOmic - Full-time

May 2020 - Aug 2020

- o Digitized medical records using a deep convolutional neural network for Indiana University Health's 30,000 patients.
- \circ Removed bottleneck from EHR digitization using computer vision and linear regression resulting in 80% faster pipeline.
- o Collected 3 hours of EEG data to find the efficacy of meditation on neural activity.

Data Scientist Intern

Durham, NC

- Center for Genomics and Computational Biology, Duke University NSF-funded Project
- Nov 2019 May 2020
- $\circ~$ Added features to RPhenoscape to find mutually exclusive phenotypes among fish using 100 years of past data.
- o Developed an extract, transform, load (ETL) pipeline from a Web Ontology Language (OWL) database in R.

Data Science and AI Content Strategist

Bangalore, India

 $UpGrad\ Education\ -\ Full-time$

Jul 2017 - May 2019

- \circ Identified factors of churn using random forests resulting in customized marketing for 1M telecom customers.
- Drove the net promoter score from 25% to 60% by developing data science courses for 10,000+ software engineers.
- Increased the revenue of online AI program by \$500,000, and helped it become the top AI program in 2018 across India.

Data Scientist Freelancer

Bangalore, India

 $Upwork.com\ -\ Part\text{-}time$

Oct 2016 - Jun 2017

- o Created a model that classifies human hand gestures using XGBoost and random forests for a video game company.
- o Cut down maintenance costs by predicting server downtime using random forests for a large database company.
- o Identified fraudulent credit-card transactions using PCA and logistic regression for a private bank.

DATA SCIENCE PROJECTS

• Video-based NLP Built a serverless application on the cloud that processes natural language from a YouTube video and provides video sentiment and a list of topics discussed in the video.

Skills: Python, Flask, Serverless Engineering on AWS, YouTube API (May 2021)

• Multi-label Human Classifier Trained a convolutional neural network that identifies a person's gender, age, emotion, and apparel based on their photos.

Skills: Python, TensorFlow, Keras, NumPy, Multi-label Classification (December 2019)

• Political Sentiment Analysis Analyzed public opinion on Demonetization (a controversial 2016 currency ban in India) using Twitter data, and found that 50% of the tweets were neutral, 30% were in favor and 20% were against the ban.

Skills: R, Text Scraping, Natural Language Processing, Twitter API (November 2016)