

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

- **Machine Learning Engineer** Seattle, WA
Research AI LLC - Part-time *Aug 2020 - Present*
 - 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*
 - Digitized medical records using a deep convolutional neural network for Indiana University Health's 30,000 patients.
 - Removed bottleneck from EHR digitization using computer vision and linear regression resulting in 80% faster pipeline.
 - 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*
 - Added features to RPhenoscape to find mutually exclusive phenotypes among fish using 100 years of past data.
 - 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*
 - 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-time *Oct 2016 - Jun 2017*
 - Created a model that classifies human hand gestures using XGBoost and random forests for a video game company.
 - Cut down maintenance costs by predicting server downtime using random forests for a large database company.
 - 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)