

AMANDEEP RATHEE

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Data Scientist
AWS Cloud Certified • Kaggle Top 1%

Work Authorization: F1-OPT
Durham, NC

EDUCATION

- **Duke University, Durham, NC**

Master's in Interdisciplinary Data Science; GPA: 3.8/4.0

August 2019 – May 2021

- Capstone Project: Achieved state-of-the-art solution to a NP-hard vehicle routing problem using attention-based reinforcement learning heuristic.
- Instructed Tableau to 150 students for Data Visualization course at Duke's Fuqua School of Business.
- Mentored 8 students in their capstone projects for Healthcare Analytics course at Duke's Fuqua School of Business.

- **Visvesvaraya Technological University, Bengaluru, India**

Bachelor's in Computer Science and Engineering

August 2013 – June 2017

Capstone Project: Developed a pipeline using machine learning that detects riders on two-wheeler not wearing a helmet that resulted in a publication in the IJAECs journal.

TECHNICAL SKILLS

- **Certifications:** AWS Certified Cloud Practitioner, AWS Certified Machine Learning Specialty.
- **Languages:** Python, R, Java, C++, and SQL.
- **Tools and Frameworks:** Tableau, Git, CLI, pytorch, tensorflow, keras, scikit-learn, pandas, numpy, matplotlib, and tidyverse.
- Proficient in **data analysis, machine learning and deep learning algorithms** for multiple applications including computer vision, natural language processing and recommendation systems.
- Strong coding ability both in terms of producing clean and efficient code as well as debugging and understanding large code bases.

RELEVANT WORK EXPERIENCE

- **Machine Learning Intern, LifeOmic Inc.**

Morrisville, NC; May 2020 - August 2020

- **Smart Clinical Document Router:** Reduced 80% time from the OCR pipeline that processes clinical documents by building a linear model that increased product revenue by \$80,000.
- **Tools:** Python, Git, CI/CD, CNNs, U-Net, Quantization, OCR, Amazon Web Services, HIPAA compliance.

- **Data Scientist Intern, Duke Center for Computational Biology**

Durham, NC; November 2019 - May 2020

- **RPhenoscape:** Completed the final phase of this \$600,000 NSF-funded project by developing the RPhenoscape package.
- **Tools** R, Git, Test-driven Development, Web Ontology Language (OWL).

- **Data Science and AI Content Strategist, UpGrad Education**

Bengaluru, India; July 2017 - May 2019

- **Telecom Churn:** Identified factors of customer churn for India's top telecom company Bharati Airtel using machine learning algorithms that helped the company make more targeted ads for its 450 million customers.
- **AI Graduate Program:** Drove the net promoter score from 25% to 60% by developing technical courses consumed by 1,000 students. The courses increased the program revenue by \$400,000, and helped it become the top AI program in 2018 across India.
- **Courses Developed:** Healthcare Analytics, Natural Language Processing, Neural Networks, and Random Forest.
- **Tools:** Python, R, and SQL.

PROJECTS AND ACHIEVEMENTS

- **Kaggle Top 1%:** Ranked #33 among 150,000+ data science practitioners on Kaggle.
- **Sentiment Analysis:** Analyzed public opinion on Demonetization – a highly controversial currency ban that happened in India in 2016 – using Twitter API, and found that 50% of the tweets were neutral, 30% were in favor and 20% were against the ban.
- **Playstation vs Xbox:** Conducted statistical analysis to determine that PlayStation games have 30% higher sales than Xbox games.