AMANDEEP RATHEE

amandeep.rathee@duke.edu
www.amandeeprathee.com

Data Scientist
AWS Cloud Certified • Kaggle Top 1%

Work Authorization: F1-OPT
Durham, NC 27705

EDUCATION

- **Duke University, Durham, NC**

  Master's in Interdisciplinary Data Science; GPA: 3.8/4.0   *August 2019 – May 2021*

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

  Developed a pipeline using machine learning that detects riders on two-wheelers not wearing a helmet for the capstone project 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 business intelligence, customer segmentation, customer churn, 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 codebases.

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
  - **SCATE**: 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 taken 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.