Aradhya Mathur

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in https://www.linkedin.com/in/aradhyamathur/   ⚙ https://github.com/aradhyam2000

Highly motivated MS Data Science student with strong math background, keen to learn more and implement skillset in the sphere of Data Science and Artificial Intelligence. Critical and creative thinker by nature with strong interpersonal and communications skills.

💼 Work Experience

Intern, *Clover Infotech* ↗
12/2020 – 05/2021 | India
- Developed Email Delivery System, Timesheet application, Work Log Calendar and Employee Attributes and Performance application
- Tools and Languages used: Oracle Apex and PL SQL
- 30% faster, reduced complexity by 15% and reduced cost by 20%.

Cloud Engineer (Python) Intern, *Simpplr* ↗
04/2020 – 05/2020 | India
- Developed Document Similarity Analyzer and Document Uploader
- Worked on AWS Lambda, AWS CLI, Salesforce, NLP libraries, ML Algorithms, SQL and S3 bucket
- Accuracy - 94%, cost reduction by 20%, 40% faster.

🗣 Technical Skills

Programming (*Experienced in Python, R, Java*),
Database (*Experienced in SQL, PL SQL, MongoDB*),
Data Visualization (*Skillful in Tableau, PowerPoint, Excel, ggplot2 and Plotly*),
Cloud Computing (*Skillful in AWS, Salesforce*),
Data Science (*Experienced in Transfer Learning Nets, Neural Networks, Clustering, Regression, Classification, Prediction, Deep Learning, Decision Tree, Boosting algorithms, Dimensionality Reduction, Random Forest, SVM, Anomaly Detection, Reinforcement Learning, A/B Testing and LSTM*),
Tools (*Skillful in PyTorch, SciKit, SciPy, Tensorflow, Statmodels, Oracle APEX, Matlab*),
Operating Systems (*Skillful in Windows and Ubuntu*),
Web Development (*Skilled in HTML, CSS, JavaScript, PHP, Bootstrap, Angular, React*)

🎖 Skill Enhancement Certifications

Applied Data Science ↗ (*Specialization Certificate authorized by IBM and offered through Coursera*)

Databases and SQL for Data Science with Python ↗ (*Authorized by IBM and offered through Coursera*)

Machine Learning ↗ (*Authorized by Stanford University and offered through Coursera*)

Data Analysis with Python ↗ (*Authorized by IBM and offered through Coursera*)

Data Visualization with Python ↗ (*Authorized by IBM and offered through Coursera*)

🎓 Education

Master of Science in Data Science,
University of Rochester ↗
08/2022 – 12/2023 | Rochester, USA |

Bachelor of Technology in Information Technology,
Vellore Institute of Technology ↗
07/2017 – 06/2021 | Vellore, India | 8.59 CGPA

📚 Coursework

Artificial Intelligence, Machine Learning, Calculus, Statistics, Time Series Analysis, Data Mining, Differential and Difference Equations, Applied Linear Algebra, Cloud Computing, Data Structures and Algorithms, Database Management Systems, Business Analytics and Object Oriented Programming

📁 Projects

Skin Lesion Classification Analysis
- Comparative analysis of VGG19, InceptionV3, InceptionResNetV2, ResNet50, Xception and MobileNet transfer learning nets
- Used ADAM optimizer to reduce memory usage by 20%. MobileNet was 83.1% accurate

Sign Language Recognition for verbally challenged and hearing-impaired people using CNNs
- Developed a model consisting of 3 convolutional layers, 3 maxpooling layers and 2 dense layers to aid hearing-impaired and other verbally challenged people
- 86.4% accurate model

Automated Essay Scoring
- Developed an automated essay assessment system by use of machine learning techniques and neural networks by classifying corpus of textual entities into small number of discrete categories, corresponding to possible grades
- MSE for Random Forest was 0.88

Peer-to-Peer Credit Lending System
- Designed a 81.4% efficient model for predicting whether a prospective borrower would "charge-off"
- Used random forest, decision tree and boosting algorithm

🧩 Extracurricular Activities

Ideathon 2.0, *Department of Mathematics, School of Advance Sciences , Vellore Institute of Technology* (2018) | *Rank* 3

International Olympiad of Mathematics 2016,
Silverzone Foundation | Special Achievement Certificate for securing 347 Olympiad Rank