ABHISHEK SAINI

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EDUCATION

University of Washington - Seattle   Sep '21 - Mar '23
Master of Science in Data Science

- GPA: 3.95/4.0
- Courses: Software Architecture, Interactive Learning, Applied Statistics and Experimental Design, Data Management for Data Science, Statistical Machine Learning

Indian Institute of Technology - Madras   Aug '11 - Jul '16
B.Tech. + M.Tech. in Electrical Engineering, Minor in Physics

- GPA: 7.9/10
- Courses: Data Structures & Algorithms, Prob. and Stat., Linear Algebra, Comm Systems, Graph Theory

SKILLS AND CERTIFICATIONS

Languages: Python, R, C/C++, Matlab, SQL
Tools: Keras, PyTorch, Docker, Kubernetes, AWS, Flask, JupyterLab, scikit-learn, pandas
Skills: Machine Learning, Data Structures & Algorithms, Test Driven Development, CI/CD
Certifications: Deep Learning Specialization, Machine Learning on Coursera

EXPERIENCE

OpsMx   Dec '20 – Sep '21
Software Developer - Data Science   *Bangalore*

- Member of data science team that is responsible for the R&D of tools to automate software deployment
- Designed an algorithm that analyzed software logs to re-identify previously seen error log patterns. Feature used by **3 Fortune 500 clients to automate defect resolution of >100 builds a day**. Reduces error re-identification time to seconds. Detects previously seen errors in >85% of test cases with precision >95%.
- Implemented an S3 compatible object storage interface using Boto3 and MinIO server to store log files in object storage instead of file storage which made our application scalable to the size of log files
- **Redesigned compute intensive log analysis APIs** to function as a distributed task queue using Celery. This made our microservice horizontally scalable
- Benchmarked open source implementations of state of the art log clustering algorithms - Spell and Drain. Modified Spell algorithm to improve F-measure of log clustering to >90%

Palpx   Mar '20 – Dec '20
Machine Learning Engineer   *Bangalore*

- Developed a browser-side **Javascript solution for remote proctoring of online exams** that performed facial recognition and activity detection using Tensorflow.js, Faceapi.js. Feature is part of the online exam product
- Finetuned a **ResNet-50 model to classify industrial fasteners** using Keras achieving 95% accuracy across 3 classes, model trained on simulated images generated using Unity's ML-Agents SDK which eliminates the cost of data labeling

Xiaomi   Aug '16 – Mar '20
Business Analyst   *Bangalore*

- Spearheaded a project to **reduce e-commerce product return rates by 50%** by using a Logistic regression model on hand-engineered features to estimate probability of product return
- Developed a review analysis tool using Python, SQL and Power BI to identify product ratings across distinct features like battery, design, performance, display, camera quality
- Forecasted monthly smartphone sales with >95% accuracy, set targets for Online and Offline teams
- Identified opportunities for growth in Offline business leading to 8 percentage point increase in market share for which I earned the **best employee award in Q1 2019**
- Used connected components analysis to quantify the sales coming from shopkeepers, resellers