Mehul Padwal

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EDUCATION

Syracuse University | *Master of Science | Computer Science | GPA:3.3/4*   **Jan 2018 - Dec 2019**
- Courses: Data Mining(Post grad level), Artificial Intelligence, Object Oriented Design, OS, Mobile Programming

Mumbai University | *Bachelors | Computer Engineering | GPA:3.6/4*   **Jul 2012 - Aug 2016**
- Courses: Data Structures, Analysis of Algorithms, Computer Architecture

TECHNICAL SKILLS

- **Programming :** Python(pandas, R, matplotlib, Jupyter Notebooks), SQL, C++, Java, Swift.
- **Machine Learning**: Regression, Random Forest, Clustering, Neural Networks, Ensembling.
- **Frameworks/Tools:** GitHub, AWS, JIRA ,Tableau, Hadoop, Spark.

PROFESSIONAL EXPERIENCE

SiriusXM Radio - *Data Science Intern, New York, NY*   **Jun 2019 - Aug 2019**
- Developed ensemble of binary classification machine learning models to predict tags for podcasts, creating more efficient way for tagging, that reduced the workload by 30%
- Devised reports to evaluate and optimize model performance to predict tags with high confidence
- Explored research papers for feature engineering to gain insight on factors influencing prediction probability, refining and bringing up the relevant tags and achieved F1 score of 0.84 on training data
- Collaborated with project stakeholders to identify errors and account for bias and uncertainty in existing predictions, improving the diversity of recommended tags
- Participated in sprint planning as a part of agile process for building end to end ML software pipeline

Accenture - *Associate Software Engineer, Mumbai, India*   **Nov 2016 - Nov 2017**
- Automated incident resolution by developing reporting tools and generating reports using Python, this helped reduced the daily manual workload by 15%
- Explored and analyzed customer data using MS-SQL to discover software pipeline flaws, leading to improvement of management software
- Collaborated with software development team using GitHub for code reviews and concurrent development

PROJECTS   **Aug 2018 - Apr 2019**

Netflix Movie Recommendation (*MapReduce, Pandas, Scikit-Learn, TensorFlow)*
- Implemented collaborative filtering, SVD and Pearson R correlation as well as ML models like KNN , Neural Networks to predict movie rating for users
- Pre-processed 100 million user rating using MapReduce in Hadoop to create user-movie-rating matrix for training
- Achieved mean squared error of 0.916 on training dataset

Keyword Spotting with Deep Neural Networks(*TensorFlow, Keras, SciPy)*
- Explored and implemented deep neural networks(Convolutional Neural networks, LSTM's and RNN's) for keyword recognition from speech using TensorFlow and Keras
- Cleaned and standardized audio data with the help of SciPy to help remove background noise
- Improved by hyper-parameter tuning, creating and combining layers to achieve accuracy of 90% on validation set

Code Publisher Client(*Object Oriented Designing**, C++, Visual Studio)*
- Developed a GUI client that enables navigation and simultaneous viewing of project files in C++ and Visual Studio
- Phase 1: Built a facility to convert C++ source code files to webpages
- Phase 2: Provided functionality to hide/show functions, classes, comments & added links of dependent files
- Phase 3: Built a client-server communication & GUI for remote code publisher using async. message-passing channel

Portfolio Website (ASP.Net Core 2.1, C#, MS-SQL, HTML, CSS, Javascript)
- Built a personal website intended for recruiters and interviewers using ASP.Net Core MVC
- Assigned role-based authentication and authorization(access) for different users using Identity framework
- Provided an ability to download or upload resume using ASP.Net Web API