Avinash Kadimisetty

Graduate Student in Computer Science at UIUC
avinash9@illinois.edu | (217) 721-7899| **avinashingit.github.io**

EDUCATION

University of Illinois at Urbana-Champaign Champaign, IL
Master's degree in Computer Science; GPA: 4.0/4.0 *August 2018 – December 2019*
Relevant Coursework: Machine Learning, Deep Learning, Data Mining, Computer Vision

IIITDM Kancheepuram Chennai, India
Bachelor's degree in Computer Engineering; GPA: 9.35/10 *August 2012 – July 2016*
Relevant Coursework: Linear Algebra, Probability & Statistics, Data Structures & Algorithms, Database Systems

WORK EXPERIENCE

Evive Software Analytics Bangalore, India
Junior Data Scientist *January 2017 – July 2018*

- Worked with the CEO and the Products Head to come up with Value Stories and performed Cohort Analysis.
- Analyzed the clickstream data and improved the conversion rates by **13%** using machine learning.
- Trained predictive models on **AWS EC2** instances to find the chance of occurrence of chronic diseases which avoided **$2.1mn** in unnecessary treatments.
- Identified patients at high risk of hospital readmission using machine learning which saved **$13,800** per person.
- Accelerated the report generation phase at Evive to reduce the number of analysis hours by **60%**.

Mu Sigma Business Solutions Bangalore, India
Trainee Decision Scientist *August 2016 – January 2017*

- **muScrum:** Developed a web-app to store and analyze scrum details to reduce bi-weekly sprint analysis hours by **15%**.
- **muMix:** Added new visualizations to show optimum spends across multiple channels in a marketing mix product.

TECHNICAL SKILLS

Languages: Python, R, SQL, C++, Java, C, HTML, CSS, JavaScript
Tools & Libraries: PyTorch, TensorFlow, H2O, scikit-learn, NumPy, pandas, NLTK, Matplotlib, dplyr, ggplot, Spark, Tableau
Big Data Tools: Apache Spark, AWS, Google Cloud
Techniques: Linear and Logistic Regression, Random Forest, SVM, Boosting, CNN, LSTM, PCA, SVD, k-Means, GMM, HMM

PUBLICATIONS

Frequent Pattern Mining approach to Image Compression India
22nd IEEE International conference on Advanced Computing and Communications *September 2016*

- Designed an Image Compression algorithm using Clustering and Frequent Sequence Mining.
- Observed an improvement of **45%** in compression ratio on benchmark datasets when compared to existing alternatives.

Image Compression – A Frequent Sequence Mining perspective employing efficient clustering India
13th International IEEE India Council International Conference *December 2016*

- Devised a compression algorithm using Patch Clustering and Sequence Mining by exploiting neighborhood properties.
- Achieved **18%** better compression ratio on benchmark image Lena, outperforming GIF algorithm.

ACADEMIC PROJECTS

Neural Image Caption Generator: Built an image captioning system using pretrained Resnet and 5-layer GRU model architecture to describe an input image in English. Achieved a BLEU-4 score of **22.0** on MSCOCO dataset.
Image Super Resolution: Created an image super resolution framework for x-ray images using Single Image Super Resolution Residual Neural Network. Stood in the top 10 percentile of the class with an average RMSE of **1.41**.
Online Recruitment Portals: Developed web portals for Faculty and Staff Recruitment at IIITDM Kancheepuram. Automated selection process reduced the manual collection and selection process by **30%**.