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A M E Y A   K A R N A D

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EDUCATION

Columbia University   New York, NY
Master of Science, Data Science, GPA: 3.71/4   Aug 2018 - Dec 2019 (Expected)
Courses: Algorithms, Exploratory Data Analysis & Visualization, Personalization, Probability and Statistics, Machine Learning, Statistical Inference & Modeling, Applied ML, Data Science & Public Policy
This Fall: Analysis of Social Networks and Crowds, Applied Deep learning (Audit), Capstone Project (Bloomberg)

Visvesvaraya Technological University   Hubli, IN
B. V. Bhoomaraddi College of Engineering and Technology   Jul 2012 – Jun 2016
Bachelor of Engineering, Information Science, GPA: 9.42/10 (Silver Medalist)

SKILLS

Languages and technologies: Python (pandas, numpy, scikit-learn, nltk, tensorflow, networkx, surprise), R (ggplot2, dplyr, data.table, Shiny), JavaScript (SVG, D3), SQL, MongoDB, Docker, Kubernetes, Tensorflow (Basic)

PROFESSIONAL EXPERIENCE

Data Science Researcher – *EdLab, Columbia University* (Columbia Data Science Scholar's Program)   Jun 2019 - Present
Technologies: *Apache PredictionIO, MongoDB, EZProxy, docker*
- Development and research on Search and recommendation Systems, Social network analysis and Topic modelling
- Currently working on Auto-tagging of documents and designing a package for research metadata retrieval

Teaching Assistant – Applied Data Science, *Columbia University*   *New York, US*
Awards: *"Excellence in Course Assistantship" for the course. Link*   Jan 2019 – May 2019
- Guided students in the use of Data preprocessing, Feature engineering, machine learning, and Communicating results in various fields like Education, Health Care, Marketing, Advertising and Social Media using R

Software Engineer - Micro Focus (spun-off from Hewlett Packard Enterprise)   Bangalore, IN
Awards: *2nd place in a site-wide Hackathon*   Technologies: *Kubernetes, Docker, python*   Sept 2016 – Jun 2018
- Worked with Agile teams to design, test and automate REST APIs for providing analytics insights into software security compliance and risk data for a datacenter automation Software.

SELECT DATA SCIENCE PROJECTS

Editorial Classifier, Bloomberg – Columbia University   Ongoing
Languages*: Python, Pytorch*   Applications: *NLP, Classification, Deep learning*
- Building classifiers to identify Editorial content in news and uncovering trends over time across news sources for Bloomberg.
- Anticipated developments include working with Bert Algorithm, Pytorch, Deep learning and Topics over time

Educational Recommendation System, Edlab
Languages*: Python (nltk, predictionIO), SQL, MongoDB*   Applications: *Recommendation systems, Topic modelling*
- Developed a multi-platform database pipeline for physical and digital user behavior, and research content using AWS.
- Built and evaluated a hybrid recommendation system on multiple digital learning platforms

Does Climate Change and Natural Resource Storage Cause Conflict? *Columbia University*
Languages*: Python (Scikit-learn), R (Shiny, data.table)*   Applications: *Regression, SVM, Decision Trees, Dashboard*
- Found correlations between factors such as Rainfall, Temperature, food prices and Bio-mass and Conflicts in Senegal. Link
- Built a Dashboard to be used by policymakers to take effective decisions to avoid natural resources shortages and conflicts.

How America Flies? - Creating Insightful Visualizations on Airline Performance Data, *Columbia University*
Languages*: R (ggplot2, dplyr), JavaScript (D3, SVG)*   Applications: *Data visualizations, Exploratory data analysis*
- Conducted Exploratory data analysis and found insights on Airline On-time performance data Project Link
- Designed a Visualization tool in JavaScript and D3 to find flight delays between top airports Tool Link

RESEARCH EXPERIENCE

- **Karnad, A.**; Yadappanavar, S.; Hiremath P. G. S., Evaluation and validation of problem solving and thinking skills based on student academic performance. *IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology 2017*, Bangalore, IN, Link
- **Karnad, A.**; Chen, Y.; Chae, H.; Natriello, G., The Application of Social Network Analysis to support collaborative e-learning, *American Educational Research Association 2020, San Francisco, CA*. Under Review

HOBBIES

Debating, reading about history and current affairs, creating educational YouTube Videos