1300 Fayette St. Apt. 52, Conshohocken, PA, 19428

# AMEYA KARNAD

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# **EDUCATION**

**Columbia University** 

New York, NY

Master of Science, Data Science, GPA: 3.77/4

Aug 2018 - Dec 2019

Courses: Algorithms, Exploratory Data Analysis & Visualization, Personalization, Probability and Statistics, Machine Learning, Statistical Inference & Modeling, Applied ML, Data Science & Public Policy, Analysis of Social Networks and Crowds, Applied Deep learning (Audit), Capstone Project (Bloomberg - Editorial Classifier)

# Visvesvaraya Technological University

Hubli, IND

Jul 2012 - Jun 2016

Bachelor of Engineering, Information Science, GPA: 9.42/10 (Silver Medalist)

B. V. Bhoomaraddi College of Engineering and Technology

#### **SKILLS**

Languages and Technologies: Python (pandas, numpy, scikit-learn, nltk, tensorflow, networkx, genism, spacy), R (ggplot2, dplyr, data.table, R-shiny), JavaScript (D3), JAVA, SQL, MongoDB, Docker, Kubernetes, PSM 1 (Professional Scrum Master)

## **PROFESSIONAL EXPERIENCE**

# **Software Engineer II - Oracle**

Conshohocken, PA Mar 2020 - Present

**Technologies**: Python, JAVA, Oracle Analytics Server

- Building analytics and dashboard capabilities Oracle Transportation Management (OTM) Software.
- · Work includes developing of key features, that help customers utilize the power of Machine learning and Data analytics

## Adjunct Associate Faculty - Data Science Consulting, Columbia University

New York, NY

**Awards**: "Excellence in Course Assistantship" for the course. <u>Link</u>

May 2020 - Jan 2021

Directed and guided students develop Data Science Projects in a Consulting-based environment

Data Science Research Engineer - EdLab, Columbia University (Data Science Scholar's Program)

New York, NY

Technologies: Apache PredictionIO, MongoDB, EZProxy, Docker

Jun 2019 - Dec 2019

- Development and research on Search and Recommendation systems, Social Network Analysis, and Topic Modeling.
- Worked on building Data pipelines for End-to-End Data Science Applications.

## Software Engineer - Micro Focus (spun-off from Hewlett Packard Enterprise)

Bangalore, IND

**Awards**: 2<sup>nd</sup> place in a site-wide Hackathon

**Technologies**: Kubernetes, Docker, Python, SQL

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 data-center automation product.

# SELECT DATA SCIENCE PROJECTS (GITHUB LINK)

#### **Editorial Classifier, Bloomberg - Columbia University**

Languages: Python(Pytorch, TensorFlow, spacy), R (ggplot)

Applications: NLP, Classification, Deep Learning

- Worked with unstructured news sources to build classifiers to identify editorial content for Bloomberg Terminal.
- Developed traditional classification algorithms with text-based features like n-grams, Parts of speech, Named entities etc.
- Trained Natural Language Processing based Bidirectional LSTM, BERT, and XLNET Models for classification <u>Link</u>.

## **Educational Recommendation System, Edlab**

Languages: Python (nltk, predictionIO), SQL, MongoDB, AWS

**Applications**: Recommendation systems

- Developed a multi-platform database pipeline for physical and digital user behavior, and research content using AWS.
- Built a hybrid recommendation system on multiple digital learning platforms and evaluated it using AB testing.

# 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

- Developed Machine Learning models to find correlations between Natural, and Economic factors and Conflicts in Senegal Link.
- Built a Dashboard to be used by policymakers to take effective decisions to avoid natural resource 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.

#### **OTHER ACHIEVEMENTS**

- Finalist at Annual Columbia Data Science Society (CDSS) Hackathon held in September 2019
- Conducted workshops on Social Network Analysis and Data Science in Education