Ajinkya Khamkar

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EDUCATION

Indiana University, Bloomington, Indiana

M.S. in Data Science — Aug 2016 – May 2018

- Cumulative GPA: 3.6 / 4.0
- Awards: Data science fellowship for 2016-2017, 2017-2018.

University of Mumbai, Mumbai, India

B.S. in Computer Science — Aug 2011 – May 2015

- Cumulative GPA: 3.6 / 4.0

PROJECTS

Link to additional projects

Amazon back order predictions

- Tackled class inseparability using non-linear data transformations, support vector machines and neural networks to achieve over 90% accuracy and over 85% precision.
- The neural network model was built using h2o framework in R.

United States presidential elections-predicting voter choice

- Designed predictive model and interactive report to estimate probability of an individual voting for a candidate based on his demographic characteristics and policy stance.
- Gradient boosting ensemble learner was designed in R and the report was designed in tableau.

Forecasting unemployment rate using Long short term memory networks

- Designed recurrent neural network model in python to forecast unemployment rate. Model's performance was excellent with a RMSE error of less than 0.05.

Image classification and localization using deep convolutional neural networks

- Designed deep learning network to classify the PASCAL VOC 2007 data set. Image localization was performed using bounding boxes and regional convolutional networks.
- Model was built using Keras library with tensorflow architecture in python.

Artificial intelligence agents for board games

- 'Connect 4' agent based on increasing depth alpha-beta pruning search; agent searched at depth 7 and returned the best possible move in 3 seconds.
- Designed board game agent for partially observable environments using Davis-Putnam-Logemann-Loveland satisfiability algorithm.
- Designed board game agent for stochastic partially observable environments using Markov decision process.

Social media mining

- Maximizing content sharing in connected networks by identifying influencers within the network.
- Individual influence was gauged using networks reaction towards their published content and its reach within the network.
- Proposed for the project to be used in market analysis, political polarization and targeted advertisements.

WORK EXPERIENCE

University of Mumbai, Mumbai, India

Research assistant — Sep 2015 – Jul 2016

Designed unsupervised document classification algorithm using weighted corpus, inverse document frequency and document scores.

Holding Willey cricket website, Mumbai, India

Data analyst — Jun 2015 – Oct 2015

Designed and implemented player database schema. Extracted information using scraping techniques. Performed data cleaning and uploading.

Increased user base by improving social media participation. Optimizing content delivery at time of maximum user traffic.

PROFESSIONAL COMMUNITIES

Association of Information Science and Technology, Indiana University

- President — Jun 2017 – May 2018

Computer Society of India, University of Mumbai

- General Secretary — Aug 2012 – Aug 2014

SKILLS

Language: R, python, SAS, Stata

Visualization: Tableau

Database: SQL, SQLite