Parth Tandel

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Available: **Jan - Aug 2019**

EDUCATION

Northeastern University, Boston, MA — Sept 2017 – present
College of Computer and Information Science GPA: 3.67/4.0
Candidate for a Master of Science in Data Science — Expected graduation: Dec 2019
Related courses: Introduction to Data Management and Processing, Unsupervised Machine Learning, Information Retrieval, Natural Language Processing, Supervised Machine learning, Algorithms, Game Artificial Intelligence

Dhirubhai Ambani Institute of Information and Communication Technology, Gujarat, India
Bachelor of Technology in Information and Communication Technology — May 2016
Related courses: Introduction to Algorithms, Software Engineering, Systems and Network Security

TECHNICAL KNOWLEDGE

Languages: Python, R, PHP, JavaScript, Processing, C, C++, Java, CSS, HTML
Databases: MySQL, MongoDB, PouchDB, CouchDB
Web technologies: CodeIgniter, LoopBack, Django, Node.js, Angular.js(v1), Apache2, Nginx, Postman
Tools: TensorFlow, Scikit-learn, Pandas, Elastic Search, Kibana, ggplot, dplyr, tidyr, beautifulsoup, Gensim, spaCy, NLTK, NumPy, SciPy, Topicmodels, R Shiny, Tableau, mochajs, chaijs, wordvector, lucene , Jupyter Notebook

WORK EXPERIENCE

Northeastern University, Boston, MA (Research Assistant) — May 2018– current
- Working on word to vector analysis of text written by early women writers using different models in python and R.
- Developed models to do word vector analysis using TensorFlow and genism in Python and word vector package in R.
- Created women writer discovery toolkit using R-shinny and tensor board and hosted it online on women writer's project domain.
- Used Nginx and mass open cloud server to host the website and the word to vector tool online.

Sublime Data System, Ahmedabad, India (Team Lead / Software Engineer) — Feb 2017 – July 2017
- Led and trained a team of 4 developers to handle roles involving full stack development in technologies like PHP, CodeIgniter, Node.js, Python, MongoDB, MySQL, Angular.js, AWS(EC2, RDS), REST, Gearman
- Built and deployed 2 production level projects involving the health sector and social network in a time span of 6 months.
- Automated testing of loopback APIs using mocha and chai testing framework

Thought(x), Mumbai, India **(**Full Stack Software Engineer**)** — May 2016 – Nov 2016
- Developed a clustering engine system for live new articles downloaded over a stream of RSS feeds using python, Gensim, spacy, and other NLP libraries with a similarity index of over 0.8 to 0.9 between clustered articles.
- Co-created the product website using Angular.js and Django-Rest framework for displaying the content of those clusters.
- Built a Google Chrome extension and Mozilla Firefox plugin using Google chrome APIs and hosted it on both chrome store and Mozilla extension website.

PlexusMD, Ahmedabad, India **(**Full Stack Software Engineer) — Dec 2015 – Apr 2016
- Worked on the core backend and frontend of the PlexusMD social networking website and app. Used CodeIgniter, PHP, and MySQL for development
- Built a mass automated mailing system using PHP scripting and Gearman job server. Created over 28 emails using HTML5, CSS with dynamic content from a PHP script and then created Cron task that runs automatically to call this script. Extended this project to create an automatic certificate mailing system for students who attended conferences organized by PlexusMD

ACADEMIC PROJECTS

Northeastern University, Boston, MA

Prioritized topic-based crawlers and search engine — July 2018 – Aug 2018
- Build a python-based crawler using a frontier system which prioritizes links based on the topics provided. Used Elastic search and Kibana to index the document and then built a search engine using angular.js to let users query those documents.

Word to vector analysis of Game of thrones text — June 2018
- Playful analysis of word to vector using TensorFlow and python to see the relation between characters using the text from game of thrones books

Reinforcement Learning Agent to play Super Mario — Mar 2018 – Apr 2018
- Using Deep Q learning and neural network in tensorflow and openAI gym environment, built a Super Mario agent that learns and play the game on its own without using any hand engineered feature.

Algorithms involved in Unsupervised Machine Learning — Jan 2018 – Apr 2018
- Developed DBSCAN clustering, K-mean clustering, Soft K-mean clustering (Gaussian mixture), and PCA reduction from scratch and used it to analyze MNIST, Fashion MNIST, 20 Newsgroup and spam base datasets.

Supervised Classification on news article — Dec 2017 – Jan 2018
- Using tf-IDF and count vectorizer developed a classification model for categorizing news articles. Used Sci-kit learn for feature extraction and modeling.

Clustering news article using Topic modeling — Sept 2017 – Dec 2017
- Built a clustering system over RSS feed and then applied Latent Dirichlet allocation and performed visualization to understand the trends and the relationships between different features using R and python.