Parth Tandel

linkedin.com/in/parth-tandel-657962a7 | parthtandel.github.io
tandel.p@husky.neu.edu | (617) 792-4006

EDUCATION

Northeastern University, Boston, MA
College of Computer and Information Science   Sept. 2017 – present
Candidate for a Master of Science in Data Science   Expected graduation: Dec. 2019
Related courses: Introduction to Data Management and Processing, Unsupervised Machine Learning, Game Artificial
                                      Intelligence, Algorithms

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, C, C++, Java, CSS, HTML
Databases:	MySQL, PostgreSQL, MongoDB, PouchDB, CouchDB
Web technologies:	CodeIgniter, LoopBack, Django, Node.js, Angular.js(v1), Apache2, Nginx, Postman
Tools:	TensorFlow, Scikit-learn, Pandas, Elastic Search, Kibana, Gensim, spaCy, NLTK, NumPy, SciPy, Topicmodels, R Shiny, Git, Tableau, mochajs, chaijs, wordvector, Slack-API, Processing-java, Lucene

WORK EXPERIENCE

Northeastern University, Boston, USA (Research Assistant)   May. 2018– current
- Working on word2vect analysis on text written by early women writers using different models in python and R.
- Used TensorFlow and genism in Python and word vector package in R to build a model to do word vector analysis.
- Using R-shinny and tensor board to build a visualization portal hosted online on women writer's project domain online.
- Using Nginx and mass open cloud server hosted the website 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 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.
- As a part of the development team worked on Angular.js and Django-Rest framework for website development and displaying the content of those clusters.
- Developed 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 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 student who attended conferences organised by PlexusMD

ACADEMIC PROJECTS

Reinforcement Learning Agent to play Super Mario (Northeastern University)   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.

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 (Northeastern University)   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 (Northeastern University)   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.

Enterprise Search Engine (DA-IICT)   May 2015 – July 2015
- Studied algorithms such as BM25, Cosine Similarity and td-idf for information retrieval. Found out different ways to improve indexing in a structured SQL database. Worked on Apache Lucene, Apache Solr, Zookeeper to set up a search engine that indexes data on different clusters on different machines over a network