

AKSHAY KULKARNI

Boston, MA 02120 | kulkarni.akshay@husky.neu.edu

(857) -869 - 0944 | [linkedin.com/in/akshay-kulkarni-461a8515a](https://www.linkedin.com/in/akshay-kulkarni-461a8515a) | <https://github.com/Akshay-A-Kulkarni>

Available : May - Dec 2019

EDUCATION

NORTHEASTERN UNIVERSITY

Khoury College of Computer and Information Sciences

Candidate for Master of Science [M.S.] in Data Science

Related Courses : Algorithms, Data Management and Processing, Information Retrieval

Boston, MA.

Sep 2018 - Present

Expected Grad : May 2020

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI – DUBAI CAMPUS

B.E. [Hons] in Electronics and Communications Engineering

Related Courses : Digital Image Processing, Communication Systems

Dubai, U.A.E.

Aug 2012 - Jul 2016

TECHNICAL PROFICIENCY

Languages: Python | R | SQL | NoSQL | C | Octave | MATLAB | Java | JavaScript | HTML | CSS

Tools: IntelliJ IDEA and PyCharm | RStudio | Jupyter | Git | Docker | Tableau | Advanced Excel & Office | MySQL | SQLite | Apache Lucene |

Libraries : NumPy | Pandas | Scikit-Learn | TensorFlow | Keras | NLTK | Nnet | rpart | klaR | e1701 | randomForest | kernlab

WORK EXPERIENCE

NORTHEASTERN UNIVERSITY - Graduate Teaching Assistant {Data Collection, Integration and Analysis}

Boston, MA.

Jan 2019 – May 2019

- Assisting the professors by tutoring 90+ students during recitations/Labs
- Designing coursework and assignments, evaluating student projects and providing learning support to students.
- Guiding and teaching students individually or in small groups to help them master assignments and to reinforce learning concepts such as tidying, storing and analysing data, employing modelling techniques - regression, clustering and other machine learning techniques in R.

PREDIKLY - Junior Analyst

Pune, India.

Aug 2017 - Jan 2018

- Learned & assisted in generating statistics and visualizations and dashboards for projects like Cloud based collaboration platform for CA/CPA/CS to manage their Practice online with cutting edge BI Tools like Tableau and assisted in building predictive analytics solutions.

ZIO TECHNOLOGIES L.L.C - Sales and Statistics Intern

Dubai, U.A.E.

Aug 2015 – Jan 2016

- Acquisitioned, managed and analysed product statistics/data for projects and tender submissions and assisted on Systems and AV integration for large scale projects in Dubai for the Government of Dubai and other major sites.

INFRA TECH CONTROLS L.L.C. - Projects Research Intern

Dubai, U.A.E.

May 2014 – Aug 2014

- Sales and on-site assistance on projects in B.M.S. (Building management systems) Installations in various business and healthcare sites in Dubai.

ACADEMIC PROJECTS

Building a complete Information Retrieval Model.

Jan 2019 – Apr 2019

- Implemented an information retrieval model in Python and using Lucene, using several ranking algorithms such as BM25, QLM & Vector Space to rank parsed and cleaned documents, while optimizing the search engine by employing stopping, stemming as well as pseudo-relevance feedback algorithms, query expansion via Word2Vec-trained embeddings & generating summarization with Luhn's algorithm.

Implementing a Web Crawler and Parsing and Tokenizing, Ranking Scraped pages.

Jan 2019 – Feb 2019

- Built a comprehensive web-crawler Python to retrieve links from a specified wiki seed page while also scraping the text from crawled pages for cleaning, tokenization & analysis to generate corpus text statistics. as well as implemented Google's PageRank algorithm from scratch to rank the crawled pages. as part of a larger aim to build a complete search/retrieval engine

Analysis of Human Development in India using IHDS-II dataset

Oct 2018 – Dec 2018

- Utilised R and its tools to collect clean and explore factors affecting human development in rural India in two different time frames of 2005-06 and 2011-12. Using generalised logistic regression models and random forest models to predict the trend of various factors on a range of indicators including factors affecting women's employment and agricultural and business yield.

Sentiment Analysis of Trump Speeches for 2015-16:

Sep 2018 – Oct 2018

- Imported and analyse all the speeches made by Donald Trump from the time of his decision to run till his inaugural speech while taking office, and performed data processing and n-gram analysis on words most used and the their tone, nature and impact

Twitter Personality Insights with IBM Watson API:

May 2018 – Jun 2018

- Utilised Python to interact and make calls to the Twitter API to pull tweets from different users and run them through IBM Watson Personality Insights in order to analyze different characteristic traits shared between Twitter user's posts.