

# Parag P. Dakle

(+1) 469-369-6853 | [parag.dakle@gmail.com](mailto:parag.dakle@gmail.com) | [linkedin.com/in/paragdakle](https://www.linkedin.com/in/paragdakle) | [github.com/paragdakle](https://github.com/paragdakle) | [paragdakle.github.io](https://paragdakle.github.io)

## EDUCATION

### The University of Texas at Dallas

*Ph.D. in Computer Science | GPA 3.95/4.00*

Richardson, TX

*Aug. 2016 – Ongoing*

### Savitribai Phule Pune University

*BE in Computer Engineering | GPA 73/100 First Class with Distinction*

Pune, India

*Aug. 2010 – May 2014*

## EXPERIENCE

### Lymba Corporation

*Software Engineer Intern (Part-time)*

Richardson, TX

*Jun 2021 - ongoing*

- Currently working on designing a Question Answering system

*Software Engineer Intern (Part-time)*

*May 2020 - Aug 2020*

- Created a Word Sense Disambiguation tool using word embeddings and a rule based system
- Designed a benchmarking framework for a Python based machine learning framework

*Software Engineer Intern*

*Jun 2019 - Aug 2019*

- Created a machine learning framework to integrate Python deep learning tools with the existing Java NLP pipeline
- Designed Named Entity Recognition system using BERT and BiLSTM in Pytorch

*Software Engineer Intern*

*May 2018 - Aug 2018*

- Implemented a semi-supervised topic-based keyword extraction tool using word embeddings giving 2x accuracy and 8x time reduction over the existing system
- Designed algorithms to extract lexicons and generate BRAT configurations from an ontology

### Bottle Rocket

*Software Engineer Intern*

Dallas, TX

*Jun 2017 - Aug 2017*

- Implemented multiple UX/UI stories for two Android applications that have been released on Play Store
- Followed SCRUM practice, GIT version control and JIRA for all the projects

### Muffin App

*Full Stack Developer*

Pune, India

*Feb 2016 - Jul 2016*

- Engineered and developed the Muffin Android Application
- Developed Spring-Boot modules and assisted in designing the product system architecture

### Great Software Laboratory

*Software Engineer*

Pune, India

*Jul 2014 - Jan 2016*

- Investigated the WebRTC protocol and modified it for an Elderly Video Calling application
- Found points of failure in an existing system and successfully scaled it up by more than 200%
- Mentored a junior employee in the development of a web-based graphical user interface for SIPp tool

## PROJECTS

### US Federal Elections Search Engine | *Java, MongoDB, Maven, Git*

Fall 2018

- Designed a continuous indexer using Single-pass In-Memory Indexing for 100k+ crawled web pages
- Implemented topic-based PageRank algorithm to rank indexed web pages
- Created the project development structure and assisted the team in API development and search result clustering

### Sentence Similarity | *Python*

Fall 2017

- Designed a tool to measure similarity of two questions from a Quora dataset
- Evaluated different scoring functions and semantic features using SVM and Logistic Regression classifiers

### DavisBase | *Java, Git*

Spring 2017

- Designed a database engine to perform CRUD operations with 9 other database commands
- Implemented B+ Trees for storing the data

### Movie Rating Prediction | *Java, Git*

Spring 2017

- Implemented Collaborative Filtering for movie rating prediction on Netflix dataset containing 100M samples

## ADDITIONAL EXPERIENCE

---

- **Teaching Assistant** at The University of Texas at Dallas (Fall 2017 - Spring 2021)
- **Git Essentials Workshop**, *Speaker*, The University of Texas at Dallas, Feb 2020.
- **Deep Learning Hands On**, *Speaker*, Dallas Natural Language Processing Meetup, June 2019.
- **Git Essentials Workshop**, *Speaker*, The University of Texas at Dallas, Jan 2019.
- **Topic-based Keyword Expansion**, *Speaker*, Dallas Natural Language Processing Meetup, August 2018.

## TECHNICAL SKILLS

---

**Languages:** Python, Java, SQL, JavaScript, HTML/CSS, PHP, Shell

**Frameworks:** Pytorch, Tensorflow, Node.js

**Developer Tools:** Git, Docker, Jenkins, RabbitMQ, ActiveMQ, Amazon Redshift, DynamoDB

## PUBLICATIONS

---

- **Dakle, Parag Pravin**, and Dan Moldovan. “CEREC: A Corpus for Entity Resolution in Email Conversations.” *Proceedings of the 28th International Conference on Computational Linguistics*. 2020.
- **Dakle, Parag Pravin**, Takshak Desai, and Dan Moldovan. “A Study on Entity Resolution for Email Conversations.” *Proceedings of The 12th Language Resources and Evaluation Conference*. 2020.
- Takshak Desai, **Dakle, Parag Pravin**, and Dan Moldovan. “Joint Learning of Syntactic Features Helps Discourse Segmentation.” *Proceedings of The 12th Language Resources and Evaluation Conference*. 2020.
- Desai, Takshak, **Dakle, Parag Pravin**, and Dan Moldovan. “Generating questions for reading comprehension using coherence relations.” *Proceedings of the 5th Workshop on Natural Language Processing Techniques for Educational Applications*. 2018.