

Employment

Research Intern **Carnegie Mellon University** **Summer 2017**

InMind Project

- Working on developing a semantic layer on top of the middleware of the InMind project.
- This approach uses a harmonious combination of techniques and models such as semantic reasoning, NELL, word-embedding models such as word2vec, and unsupervised machine learning.

Software Engineer, Intern **Goldman Sachs** **Summer 2016**

- Worked on upgrade of company's proprietary internal database resiliency software
- Successfully developed a test platform for upgrading the division's database resiliency software.
- Researched and created extensive documentation outlining the upgrade process and test platform use.

Software Engineer, Intern **Persistent Systems** **Summer 2015**

- Developed Home Security System by creating an android application to allow the user to monitor video feeds.
- Worked on OpenCV to train the cascade classifier for both the positive and negative images.
- Both object based and non-object based images were used, the android application worked with a mild latency due to feed broadcast

Software Engineer, Intern **Micropro Software Solutions** **Summer 2015**

Android

- Worked on various modules in android as part of the internship.

Education

Los Angeles, US **University of California, LA** **Sep 2017**

- Masters in Computer Science, Sept 2017.
- Graduate Coursework: Pattern Recognition and Machine Learning, Big Data Analytics, Machine Learning in Natural Language Processing

Pune, India **College of Engineering Pune** **July 2013 – June 2017**

- Btech in Computer Engineering, June 2017. GPA: 8.82
- Undergraduate Coursework: Maching Learning; Data Mining; Advanced Database Management System; Operating Systems; Databases; Algorithms; Programming Languages; Comp. Architecture; Calculus III.

Additional Technical Experience and Awards

- **Open Source Contributor**, contributed to the Mozilla Firefox browser by making 5 bug fixes.
- **Runners Up, Barclays Hackathon (2015)**: Stood runners up for Model analyzer project, out of 50 projects.
- **Winner, The NGO Challenge (2016)**: Designed a solution for tracking and monitoring the disabled population of India for Ekansh NGO.

Technical Experience

Projects

- **Personalized Medicine**: The intention is to classify gene variants by training on an expert annotated knowledge base of gene mutations. For achieving this we proposed a deep learning based ensemble architecture which incorporates features generated from Bag of Words, Word Embeddings, CNN, LSTM and attention based hierarchical architecture.

- **SecureNLP(SemEval 2018 Task 8):** The intention is to be able to extract highly relevant sentences from malware reports. For achieving this we proposed a deep learning based architecture using LSTM and CNN to improve the performance.
- **Stock Market Predictor:** A web application that allowed the user to create and test regression models for stock prices of a company and then predict. R, Shiny framework
- **Time Table Generator:** A genetic algorithmic solution to the time table generation problem, generating time tables for classes and schedules for teachers. C
- **Cricket Score Tracker:** An android application for real time tracking of cricket scores and for analyzing the results of the tournament. Android
- **Search Engine:** Developed a prototype search engine which searches in a static database of crawled and tokenized web pages. Django
- **Load Balancing Using HaProxy:** Implementation and analysis of load balancing algorithms using HaProxy.
- **Hospital Management System:** Developed a file based system for managing the patients and doctors in a hospital. C

Research Experience

Projects

- **Undergraduate thesis (2016-17)** Designing a framework to help applications that rely on relational, non-relational, search and cache databases to implement polyglot persistence efficiently. The framework would allow the applications to interact with a single logical schema instead of creating multiple models for different use cases. This project is all about simplifying the work that an engineer has to do to integrate with multiple data sources.

Research Publications

- Shreyas Lakhe, 2016, 'Review of Applications of Polyglot Persistence' Paper accepted at the 19th International Conference on Computer Science and Information Technology ICCSIT 2017 Boston, USA-Boston
- Shreyas Lakhe, 2016, 'Review Of Methods Of Expert System Approach To Provide Artificial Intelligence In Production Planning And Scheduling' IX, 11, "Industrial Engineering Journal", NOV 2016, PP 6-8.

Workshops and Courses Attended

- High Performance Computing on Multicore and GPU at Visvesvaraya National Institute of Technology, Nagpur
- Three weeks course on Data Structures and Algorithms in C++ at IIT Kharagpur by Prof. Partha Sarthi Dey.
- Attended a 3 weeks' workshop on Open Source Development by Prof. Abhijeet Meenakshi

Additional Experience and Awards

- **Event Head** and member of the core team for the Ed-Cell Event, E-Fest 2015 at COEP.
- **Learning Facilitator** in Intelligence Plus Innoventure Challenge, India's first Entrepreneurship challenge for students.
- **Conducted Lecture** on XML storage and applications for final year Btech students at COEP.