

# **Aditya Mahajan**

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## **EDUCATION**

**M.S., Computer Science, Data Science**

The University of Texas at Dallas

May 2017

GPA **3.55**

**B.E., Computer Science**

Panjab University, Chandigarh, India

June 2014

CGPA **8.3/10**

## **WORK EXPERIENCE**

**Directi, Mumbai, India**

October 2014-June 2015

Software Development Engineer

- Developed a fuzzy search for college/institution lookup for registering candidates on the website
- Programmed custom judges for problems in order to check solution to coding problems
- Wrote CRON jobs to daily extract the rank/popularity on websites like Alexa, LinkedIn, Facebook and Twitter

**Alert Enterprise Inc., Chandigarh, India**

January 2014 - September 2014

Software Development Engineer

- Wrote the backend queries for the incident monitoring dashboard
- Resolved the application defects to facilitate stable releases
- Redesigned legacy backend to integrate with the new badge designer UI

## **TECHNICAL SKILLS**

**Programming Languages and Tools:** C/C++, JAVA, Python, JavaScript

**Databases:** Oracle, MySQL, SQL server

**Operating Systems:** Linux, Windows, MAC OS

**Data Science Languages and Tools:** Octave, R, ScikitLearn, Pandas, Hadoop, Mapreduce, Pig

## **PROJECTS**

**Cuckoo Hashing**

- Using two hash functions increased the load factor to 0.80 as compared to Java's Hash map load factor of 0.75

**Custom SQL Shell & DBMS Engine**

- Made custom implementation of a database in python
- Used binary files to store the data and used first level indexing in order to reduce the looking time

**Parallel Bipartite Graph Matching**

- Wrote the data structure to grow bipartite matching trees in parallel
- Decreased the time taken from 1 minute to 4 seconds
- Awarded excellence credit for the same

**Character Recognition**

- Given a matrix with pixel intensities, made a model to recognize a character.
- Used Support Vector Machine to model the data
- Extracted best features using Principal Component Analysis

## **ACHIEVEMENTS**

- Google Code Jam- Reached the second round and secured a rank of 883 out of 10000 participants.
- Ranked 245 out of 4000 participants in the Santander prediction challenge on Kaggle.
- Stood second in DECODE, the coding event at VYOM 2014(PEC's annual Technical Fest)