## **ROHIT TAKHAR**

New Delhi, India

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## **EXPERIENCE**

## Research Engineer

### **Aspiring Minds**

June 2016 - Ongoing

Gurugram, Haryana, India

### • Automatic business email evaluation

Co-developed a system which can evaluate emails on content/contextual relevance, grammar and structure of the email.

## • Language independent features for grading programs

Experimented with different languages to see if we can develop a system/intermediate representation which can solve our problem of scaling current system of program grading to multiple languages. This is similar to applying source to source transformation across different languages.

### • Grading uncompilable programs

Developed a system to grade uncompilable programs on the basis of logical correctness of the program. Supported languages: C, C++ and Java.

## Research Intern

### **Aspiring Minds**

Dec 2015 - Feb 2016

Gurugram, Haryana, India

• Developed a system to identify the time complexity of python programs. This approach was further scaled to 9 more languages.

## **Student Trainee**

### **Samsung Research Institute**

June 2015 - July 2015

Bengaluru, Karnataka, India

 As part of Memory Solutions Group, I developed a system to run tests on SSDs parallely. It improved the efficiency of the team to a large extent. Reports were emailed to the concerned people automatically. This internship helped me in understanding the concepts to write production-grade code.

## **PROJECTS**

## Operating System Algorithms Visualization App Advisor: Prof. Pinaki Chakraborty, NSIT

June 2015 - March 2016

Gurugram, Haryana, India

• Co-developed a desktop and android application which can be used by students/teachers to visualize various operating system algorithms (CPU Scheduling, Page Replacement etc.)

## Multi-segmented FTP Client

### Advisor: Prof. Khushil Saini, NSIT

Jan 2015 – April 2015

Gurugram, Haryana, India

• Developed multi-segmented FTP client which follows RFC 959.

## **PUBLICATIONS**

Rohit Takhar, Varun Aggarwal. Grading uncompilable programs. *Under review @ KDD*, 2018

## **EDUCATION**

# B.E in Computer Engineering Netaji Subhas Institute of Technology

Aug 2012 - June 2016 **Percentage:** 74.23%

## **ACHIEVEMENTS**

### **Employee of the Month**

Awarded for contributing with new research ideas and implementing those ideas at Aspiring Minds.

## Merit Scholarship

Awarded scholarship every year during bachelors (2012–2016) for distinctive performance in academics.

#### **ACM ICPC**

Chennai Region 2015. Our three member team secured 55 rank.

#### **AIEEE**

Secured All India Rank 880.

## **SKILLS**

## **Programming Languages**

Python C/C++ PHP

### **Tools and Libraries**

MySQL Git scikit-learn keras pandas LLVM Clang

## **RESEARCH INTERESTS**

## Automatic assessment of programming problems

Assessing the logical ability of a candidate and providing a fine grained feedback.

### Automatic program repair

Developing systems which can automatically localize fault in programs and can repair them without affecting the logic of the program.

### **Program synthesis**

Developing systems that can assist non-programmers write programs.

## **VOLUNTEER**

# Machine Learning India ml-india.org

June 2017 - Present

Co-organizing meetups in Gurugram and managing meetups in other cities across India.