

# Kushal Singh

SOFTWARE ENGINEER

RA-1701, Romell Aether, Goregaon East, Mumbai

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## Education

### International Institute of Information Technology

B.TECH IN COMPUTER SCIENCE AND ENGINEERING - CGPA : 8.94/10

Hyderabad, India

Aug 2013- April 2017

## Experience

### Media.net

PLATFORM ENGINEER

Mumbai, India

Jul 2017 - PRESENT

- Worked towards building a back-end system for generating Auto-Templates which are ads optimized based on website's appearance.
- Built and deployed overall service infrastructure utilizing Docker containers and Jenkins while using Selenium along with headless Firefox to extract colors from websites and designing templates/ads based on it
- Worked towards clustering websites based on appearance to introduce different templates/ads into existing system and to improve the performance of the learning algorithms being used.

### Haiku, Google Code-In

MENTOR

India

2015- PRESENT

- Worked as a Mentor for Haiku (BeOS based operating system) to introduce students to open source during Google Code-In

### Chapel, Google Summer of Code

STUDENT DEVELOPER

India

May 2016 - Aug 2016

- Worked primarily towards developing basic blocks for Incremental compilation, restructuring the generated codes, building an initial version of the code-cache and analyzing ways to improve the performance of the Chapel compiler.

### RIOT-OS, Google Summer of Code

STUDENT DEVELOPER

India

May 2015 - Aug 2015

- Built a module to add dynamic linking support for RIOT-OS to allow the software to be updated at run-time. The work focused on creating an ELF-parser to fix the addresses used within and across modules for target boards.

### IIIT-Hyderabad

TEACHING ASSISTANT

Hyderabad, India

2015-2017

- Operating Systems (Monsoon 2015)
- Computer System Organization (Spring 2016, Spring 2017)
- Compilers (Monsoon 2016)

## Past Projects

### Map-Reduce Framework

STUDENT UNDER PROF. VIVEKANAND VELLANKI [COLLEGE PROJECT]

Hyderabad, India

Spring, 2016

- Built a distributed shared file-system using Java RMI and Google Protobuf.
- Implemented Map-Reduce framework on top of the shared file-system to build a distributed grep search.

### Gamification Engine

STUDENT DEVELOPER, FORTUITY INFOTECH PVT. LTD.

Hyderabad, India

Monsoon, 2014

- Worked towards building the backend of a pluggable-gamification engine by creating an event based system which used Rabbit-mq and MySQL to keep track of user actions and translate the user events into quests and reward-points.

### CI/CD Pipeline with Docker

STUDENT UNDER PROF. VASUDEVA VARMA [COLLEGE PROJECT]

Hyderabad, India

Monsoon, 2015

- Developed a build system that leverages Docker for implementing Continuous Integration and Delivery pipeline.
- Project allowed git commits to start off packaging a Docker image after successful build and provisioned them directly in a Virtual Machine.

### Cloud Orchestration Layer

STUDENT UNDER PROF. VASUDEVA VARMA [COLLEGE PROJECT]

Hyderabad, India

Monsoon, 2015

- Created a cloud orchestration layer using libvirt and ceph
- Created REST-API's to provide support for creation, deletion, querying and scheduling of virtual machines in a network

## Achievements

2013-2017 **Dean's Merit List**, Listed in Dean's Merit list for Academic Excellence (6 semesters) in College

Hyderabad, India

2012-2013 **AIR 737**, Ranked 737 in IIT-JEE Mains among 1.3 million people who appeared for the exam.

India

2012-2013 **AIR 92**, Ranked 1st in state and 92nd in India in the IIT-JEE Mains Aptitude Test (Paper 2).

India

## Technologies Used

- **Current Experience** : Java, Hive, MySQL, Redis, Selenium, Linux, OSX
- **Past Experience** : C++, C, Python, Bash, Javascript, HTML, CSS, Chapel