# **SURAJ CHAFLE**

## Graduate Student at Illinois Institute of Technology, Chicago

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## **EDUCATION**

### MS in Computer Science

Illinois Institute of Technology, Chicago

**GPA 3.57** / 4.00

#### BTech in Electronics & Telecom.

**College of Engineering, Pune** 

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**GPA 7.70** / 10.0

## **WORK EXPERIENCE**

## C Programmer - Smart Grid Research

Illinois Institute Of Technology

Automated C code generation for Power System models in Python. Optimized the generated code for performance.

## Software Design Engineer

#### **Imagination Technologies**

- Developed a white-box test framework in C++ for Video Driver API testing which helped in earlier bug detection.
- Developed a test framework in Python with SOAP, Django and MySQL which greatly simplified automation testing.

#### Software Engineer

#### **Robert Bosch**

I June 2012 - June 2012 ♥ Bangalore

- Developed tools to automate building of Navigation SDKs using CMake, Perl and Shell
- Automated testing of navigation software using Perl and Shell.

## RESEARCH EXPERIENCE

## Multiprogramming with Nautilus

#### **Illinois Institute of Technology**

Working with Prof. Kyle Hale to explore possibility of achieving multiprogramming without having to implement heavy weight process subsystem for Nautilus Aero-kernel by using Intel's virtualization features.

## TOP SKILLS

</> C++, Python, Java, C, Shell, MySQL, Git, Gdb, CMake, Spark

## **FAVORITE PROJECTS**

### Benchmarking AWS instance

Developed a tool in C to benchmark CPU, memory and disk performance of an AWS instance. Compared results against standard benchmarking tool viz. linpack, iozone & stream.

## Distributed Job Scheduling

Developed a job scheduler in Python using AWS SQS & dynamoDB mimicking Animoto video creator. S3 was used to store generated videos.

## Travelogue- Django App

% http://goo.gl/nXL9p3

A web app to maintain past travel records. Designed the database, front-end, APIs for future development and user-interface.

## **PUBLICATIONS**

### **ACM Supercomputing** Conference 2016

#### Optimzing search in un-sharded large scale distributed system

Mov 2016 https://goo.gl/902eK6

We presented a distributed search framework that does not rely on sharding and can be applied to a range of distributed storage models.

## **COMPETITIONS**



**NGA's Expedition Hackathon** 



**AT&T Smart City Hackathon**