Suraj Chafle

Graduate Student at Illinois Institute of Technology, Chicago

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EDUCATION

MS in Computer Science

Illinois Institute of Technology, Chicago

📅 Sep 2014 - Dec 2016   📍 Chicago

GPA
3.5 / 4.00

BTech in Electronics & Telecom.

College of Engineering, Pune

📅 Aug 2008 - June 2012   📍 Pune

GPA
7.70 / 10.0

WORK EXPERIENCE

C Programmer - Smart Grid Research

Illinois Institute Of Technology

📅 May 2016 - Oct 2016   📍 Chicago

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

Software Design Engineer

Imagination Technologies

📅 Feb 2015 - Dec 2015   📍 Pune

- Developed a test framework in C++ to do white box testing for Video Driver APIs developed for different platforms.
- Developed a test framework in Python with SOAP to distribute tests, django and mysql for frontend and python wrappers for execution.

RESEARCH EXPERIENCE

Document search in distributed systems

Illinois Institute of Technology

Optimize document search in unsharded large scale distributed systems

- Worked with Prof. Ioan Raicu to develop a framework with distributed query distribution overcoming limited parallel connection in document search with centralized server. Publication accepted at SC'16.

Multiprogramming with Nautilus + Dune

Illinois Institute of Technology

Working with Prof. Kyle Hale to develop a system for Nautilus aerokernel allowing select processes access to protected hardware by using hardware virtualization features similar to dune kernel module for linux.

TOP SKILLS

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

FAVORITE PROJECTS

Benchmarking AWS instance

📅 Jan 2016 - Feb 2016   📍 Chicago

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

📅 Apr 2016 - Apr 2016   📍 Chicago

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

Extraction of Road & Lane boundary from Sat-Imagery

📅 Jan 2016 - Feb 2016   📍 Chicago
🔗 https://goo.gl/Bc8rHP

Developed a tool using OpenCV in python which returns poly-lines for road and lane boundaries

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.

ACCOMPLISHMENTS

🏅 **NGA's Expedition Hackathon**

🏅 **AT&T Smart City Hackathon**

🚀 **Part of team SWAYAM**
CoEP's student satellite launched by ISRO