

Mayank Jha

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EDUCATION

NATIONAL INSTITUTE OF TECHNOLOGY

B.Tech in Computer Science and Engineering

July 2015 | Durgapur, India

First Class, Distinction

Cum. GPA: 8.48 / 10.00

LINKS

Facebook:// [mayank.jha.71](#)

Github:// [mjnovice](#)

LinkedIn:// [mayank-jha-a895a533](#)

Twitter:// [@mjnovice](#)

Quora:// [Mayank-Jha-1](#)

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms

Computer Networking + Practicals

Computer Architecture

DBMS + Practicals

Distributed Systems

Software Engineering + Practicals

Operating Systems

SKILLS

PROGRAMMING

Fairly skilled:

Golang • Shell • Python • Javascript

C • C++ • CSS • HTML • MySQL

Django • AngularJS

Familiar:

Java • PHP • Android • PostgreSQL

TECHNOLOGIES

Fairly skilled:

Linux • Redis • HAProxy • Nginx

Locust • Git • Zookeeper

OPEN SOURCE

CONTRIBUTIONS

KDE

Konversation • Trojita • Telepathy

Kate

MISC

Waarta • Geany

EXPERIENCE

CAROUSELL Software Engineer, Backend Engineering

August 2017 - Present | Singapore

- Built the Ads platform for serving advertisements on the application. Developing it in **Go**.
- Worked closely with the product, saw 2.5x growth of the team in a span of 3 months.

FLIPKART Software Engineer (SDE 2), Cloud Platform

July 2015 - August 2017 | Bengaluru, India

- Designed and implemented a virtual testing framework for our load balancer service, by making a mock of the entire data center. Used **MiniNExT** library for emulating the network switches, protocols like BGP etc. The framework was built in **Python**. It enabled the developers to locally test the service on a VM, saving 5x time spent in testing and validation. Made the framework generic to enable taking network topology as input fed from a config file and generate the environment. It involved using a library wrapped around a Software Defined Network, through the Open Flow protocol.
- Designed and implemented the Health Check Service component of the Elastic Load Balancer, used to report the health state of hosts (1 million) in the data center. Implemented it in **Go**. The health check service worked in a decentralized cluster setup, with a health check node in every major zone. The health status of a node would be determined by a majority consensus among the health checker nodes. A leader among the health checker would decide about the final health status of the node. The leader would be chosen using a Leader Election Recipe relying on **Zookeeper**.
- Created an automated deployment tool for conversion of a baremetal to a Load Balancer Instance by installation the OS, and installing necessary packages. The tool enabled one to smoothly do operations like provisioning, destruction, allocation etc. from a cli interface rather than making bulky api calls.
- Created NFR Benchmarking toolkit using popular load testing technologies like **wrk**, **locust**, **ab**. Allowed us to detect bottlenecks in our system, and scale them appropriately.

FINAL YEAR UNIVERSITY THESIS

NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR March 2015 - April 2015 | Durgapur, India

- Worked on a PoC project to demonstrate the efficiency of code-offloading approach to reduce the consumption of battery in modern-day mobile applications. Created a game application on the Android framework, <https://github.com/mjnovice/aapchoo>. Enabled testing of a ILP(Integer Linear Programming) solution for the same. I did this under the mentorship of Professor Parag Guhathakurta.

EXTRACURRICULAR

ACTIVITIES

Convener, Maths And Tech Club, NIT Durgapur

Technical Head, GNU/Linux Users Group, NIT Durgapur

Represented College at ACM/ICPC Regionals 2012

INTERNSHIPS

GOOGLE Summer of Code Intern

May 2014 – August 2014 | Remote

- Worked with the Fedora Project, to build a cached Bug tracking system, called Bugspad. Used **Redis** as the cache, and **Go** as the framework. Worked on making the system scalable by doing stress tests on the same. <https://fedoramagazine.org/5tftw-2014-07-01/>

GETMEASHOP Python/Django Hacker

May 2014 – August 2014 | Remote

- Made a B2B portal for sellers to list their products simultaneously on multiple e-commerce platforms(Amazon, Flipkart, Snapdeal etc.) using **Haystack**, **Solr**, **Django**.
- Implemented a price crawler for various products on Amazon, Flipkart and Snapdeal using **Scrapy** library in **Python**. This was used by the price-comparison engine used by the core-product of setting up online stores for small scale businesses.

ASHNIK PTE LTD Winter Intern

December 2013 – January 2014 | Remote

- Designed a UI for a database monitoring system, for a PostgreSQL system. This was done in **Django**, and had to use RRD for the graphing tool.

GOOGLE Summer of Code Intern

May 2013 – September 2013 | Remote

- Worked with Ankur India, to make a tool for the judging the aesthetic quality of fonts for Indic scripts like Devanagari, Bengali, Gujarati, Telugu etc. It compared with a set of standards and give scores on various parameters. Achieved this using the **Python** API bindings of **FontForge**. The main motivation was to reduce the dearth of good quality Indic fonts.

HOBBY PROJECTS

MJLANG esoteric programming language

- This was an attempt to write an esoteric programming language wherein the programs would be the song lyrics of Michael Jackson. Initially it was just words of his songs, modelled around another Turing complete esoteric language **brainfuck**. Also got featured in a blog, about computational creativity <http://blog.venturesity.com/code-word-play>.

FREEPL online game about Fantasy Cricket

- Developed this for the College fest Mukti, to play the fantasy league of cricket game by making teams.