

# Parth Thakkar

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## EDUCATION

### NATIONAL INSTITUTE OF TECHNOLOGY - TRICHY

B.TECH | 2014 - 2018

Computer Science Engineering

Cum. GPA: 8.90 / 10.0

## LINKS

Web:// [thakkarparth007](http://thakkarparth007)

Github:// [thakkarparth007](https://github.com/thakkarparth007)

LinkedIn:// [thakkar-parth](https://www.linkedin.com/in/thakkar-parth)

## COURSEWORK

### UNDERGRADUATE

Operating Systems

Formal Languages & Automata

Internetworking Protocols

Database Systems

Data Structures & Algorithms

Probability Theory

Discrete Structures

## SKILLS

**Proficient:**

Go • Python • Javascript • C

**Intermediate:**

C++ • Java • Bash • PHP

**Web:**

NodeJS • MongoDB • MySQL

React • ExpressJS • Serverless

**Tools & Tech:**

AWS • Git • Cuda • Alexa Skills Kit

Arduino • Hyperledger Fabric

## AWARDS

2017, 3rd

Pragyan Capture the Flag, NITT

2017, 2nd

Shaastra Programming Challenge, IIT M

2016, 3rd

Code-O-Soccer, Kshitij, IIT Kharagpur

2016, 2nd

Onsite Programming Challenge, Vortex, NITT

2016, 3rd

Three's a crowd, Pragyan, NITT

2015, Top 10

Ingenuis Hackathon

## EXPERIENCE

### IBM RESEARCH LABS, INDIA | RESEARCH INTERN

May 2017 – August 2017 | Bangalore, India

- Worked on performance benchmarking and optimizing Hyperledger Fabric, IBM's Blockchain platform.
- Wrote a generic, highly configurable and reusable load generator, which was used for further performance studies.
- Produced a report on the relations between several configurable and observable parameters of Fabric v1.0.
- Proposed 3 key optimizations that improved performance 16x (from 140tps to 2250tps). All the proposed optimizations are going to be merged into the Fabric codebase.

### DOS LAB, IIT MADRAS | RESEARCH INTERN

Nov 2016 – December 2016 | Chennai, India | [Report link](#)

- Worked at the Distributed & Object Systems lab on setting up a POC hybrid private cloud between IIT M and CDAC Chennai using OpenStack.
- The cloud is to run on BOSS MOOL, a Linux variant.
- Proposed a secure software-license sharing mechanism between multiple private clouds deployed on OpenStack.

### AMAZON | SOFTWARE ENGINEERING INTERN

May 2016 – July 2016 | Chennai, India

- Worked on an Echo-driven Tech Conference, where Amazon Echo devices use voice recognition to act as help desks and MoC's.
- Built a fully serverless backend with NodeJS, AWS, and Serverless to power FireOS Apps, the Alexa Skill and a website. Used JWT for authorization.
- Integrated it with internal systems, and handled Ops of the whole system.

## PROJECTS

### GENERIC APPLICATIONS PORTAL

<https://github.com/delta/generic-applications-portal>

- A tool to generate any applications portal super easily.
- Wrote a DSL based on HTML to generate both frontend and backend code.
- Handles validation, saving, preloading & providing multiple views of same data.
- The DSL-compiler validates all data references across different views.

### DALAL STREET <https://github.com/thakkarparth007/dalal-street-server>

- Event in Pragyan, techfest of NIT Trichy. A virtual stock market game where players compete against each other and bots to get rich.
- Lead a team of programmers to make a realtime platform involving a fast matching engine and automated bots
- Used gRPC to support hundreds of concurrent mobile, web and bot clients.

### REMBOOK <https://github.com/delta/rembook>

- A single page webapp for sharing memories of the graduating students.
- The webapp handled heavy load (several million requests in a few days) and also handled generation of PDFs of all the memories for a given person.

## EXTRA CURRICULARS

Delta Force

Bits N Bytes

Project Manager at the premier computing club of NIT Trichy

Author at CSE Newsletter-cum-Magazine