# Parth Thakkar

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## **EDUCATION**

# NATIONAL INSTITUE OF TECHNOLOGY - TRICHY

B.TECH | 2014 - 2018 Computer Science Engineering Cum. GPA: 8.90 / 10.0

#### LINKS

Web:// thakkarparth007 Github:// thakkarparth007 LinkedIn:// 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

 $\mathsf{React} \bullet \mathsf{ExpressJS} \bullet \mathsf{Serverless}$ 

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 Ingenius 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

May 2016 - July 2016 | Chennai, India

- 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 powered by 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/thakkarparthoo7/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 Project Manager at the premier computing club of NIT Trichy

Bits N Bytes Author at CSE Newsletter-cum-Magazine