## Rohit Naik Jarupla

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#### **Education**

Indian Institute of Technology Delhi

Bachelor of Technology

New Delhi, India 2014 - 2018

Hyderabad Public School, Begumpet

ICSE Boards CGPA: 9.47 Hyderabad, India 2002 - 2012

## Work Experience

## Web Developer Intern

NextGen, Bangalore Summer 2016

Dashboard Development in JavaScript

- Designed, developed and delivered a large number of customized web based dashboards (linked to the companys proprietary product named p3 platform) which enabled client companies to monitor their CSR projects. Technology used: HTML5, CSS3, JavaScript, jQuery, Bootstrap, C3.js.
- Created a library to match the data model of p3 platform with the level of customization required for the web based dashboards. Integrated several libraries to provide for higher level data aggregation and transformation. Technology used: JavaScript, AJAX, JinqJs, Lodash, Loopback powered REST APIs.

#### **Projects**

#### Game Player for TAK

IIT Delhi

course project under Prof. Mausam

July 2016 - Sep 2016

- Designed a bot for the Real Time Strategy Game, TAK, using Adversarial Search.
- Implemented Depth-Limited MiniMax Tree Search, Alpha-Beta Pruning and Transposition Table. Used Genetic Algorithm to drastically improve the evaluation function.

#### **Elevator Simulation Model**

IIT Delhi

course project under Prof. Mausam

Aug 2016 - Nov 2016

- Designed an Elevator Simulator to optimize electricity and total waiting time.
- Modeled the problem as Markov Decision Process and implemented UCT and function approximation, along with memory optimization due to a huge state space.

#### Multiplayer Ping-Pong

IIT Delhi

course project under Prof. Vinay Ribeiro

March 2016 - May 2016

- Wrote server and client programs for a multiplayer ping pong game played over the network using Swing Java Library for GUI and Socket Class for networking (UDP Protocol).
- Supports up-to 4 players simultaneously and disconnected/crashed player are replaced by bots to ensure continuity of the game.

#### ARM Processor in VHDL

IIT Delhi

course project under Prof. Anshul Kumar

Feb 2016 - May 2016

- Designed and implemented an ARM Processor with RAM, Register File and an ALU, involving Pipelined data-path and control-path.
- Also implemented an intelligent data-forwarding mechanism and a co-processor for branch prediction.

## Complaint Managament System (Android App)

IIT Delhi

course project under Prof. Vinay Ribeiro

June 2016 - April 2016

- Built a complaint management system for IIT which allowed users to lodge individual or institute level complaints over a wide range of categories.
- Additional features include commenting, up-vote/down-vote and selective visibility of complaints. Added appropriate administrative controls like marking a complaint as resolved and sending to higher authority.
- Used Django to design and develop the back-end and web interface.

## **Independent Projects**

#### Web Scraper in Python

Python Programming

July 2016 - Aug 2016

 Built a Web Scraping Script in Python using the Modules Beautiful Soup and Selenium that scans a given course page and automatically downloads the Lecture Notes and Tutorials and saves them locally in appropriate format.

## Handwritten Digits Recognition Software

Machine Learning

October 2016

Designed a Neural-Network to decipher images of handwritten digits in MATLAB.
Implemented the Backpropagation Algorithm to minimize the Cost Function.

#### Awards, Grants & Honours

**KVPY** Scholarship

2012

Secured All India Rank 5\*

National Science Olympiad 2012

**July 2012** 

Secured Rank 69

Silver Medal for Academic Excellenece

 $March\ 2012$ 

# **Designing and Coding Skills**

Extensive JAVA, JAVASCRIPT, PYTHON, C++, POSTGRESQL

Intermediate ARM/X86 ASSEMBLY, SML, VHDL, MATLAB, HTML/CSS

Basic Shell Script, PHP