

Rohit Naik Jarupla

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Education

Indian Institute of Technology Delhi

New Delhi, India

Bachelor of Technology

2014 - 2018

Relevant Courses: Artificial Intelligence, Machine Learning, Operating Systems, Analysis & Design of Algorithms, Database Management Systems, Computer Networks, Parallel Programming

Hyderabad Public School, Begumpet

Hyderabad, India

ICSE Boards

2002 - 2012

CGPA: 9.47

Work Experience

- **Web Developer Intern** NextGen, Bangalore
Dashboard Development in JavaScript *Summer 2016*
 - 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

- **Facial Attractiveness Classifier** IIT Delhi
course project under Prof. Parag Singla *Feb 2017 - March 2017*
 - Used Support Vector Machines (SVMs) to build a facial attractiveness classifier, using both Linear Model as well as Guassian. Solved the SVM optimization Problem using a general Purpose convex optimization packages, CVXPY and LIBSVM
- **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.

• **Multoplayer Ping-Pong**

IIT Delhi

course project under Prof. Vinay Ribeiro

March 2016 - May 2016

- Wrote server and client programs for a multilayer 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 Pipe-lined data-path and control-path.
- Also implemented an intelligent data-forwarding mechanism and a co-processor for branch prediction.

• **Complaint Management System (Android App)**

IIT Delhi

course project under Prof. Vinay Ribeiro

June 2016 - April 2016

- Portal to lodge, view or mark as resolved, a wide range of Complaints (Institute, Residential or Individual). Back-end Database Programmed in Django.
- Complaints are prioritized on votes/comments and are sent to respective concerned Authorities/Departments (Carpentary, Electrician, Plumber, etc.)

Independent Projects

• **Web Scraper in Python**

Python Programming

July 2016 - Aug 2016

- Built a Web Scraping Script in Python using the Modules BeautifulSoup 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 Back-propagation Algorithm to minimize the Cost Function.

Awards, Grants & Honours

KVPY National Scholarship

2012

*Secured All India Rank 5**

National Science Olympiad 2012

JULY 2012

Secured Rank 69

Silver Medal for Academic Excellence

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