Rohit Naik Jarupla
Senior Undergrad, Computer Science,
Indian Institute of Technology Delhi

Ph: +91 9810422284
cs1140224@cse.iitd.ernet.in
http://www.cse.iitd.ernet.in/∼cs1140224/

Education

Indian Institute of Technology, Delhi — New Delhi, India
Bachelor of Technology — *2014 - 2018*
Relevant Courses: Cloud Computing, Artificial Intelligence, Machine Learning, Operating Systems, Analysis & Design of Algorithms, Database Management, Computer Networks, Parallel Programming

Hyderabad Public School, Begumpet — Hyderabad, India
ICSE Boards — *2002 - 2012*
CGPA: 9.47

Internships

- **Software Engineer** — Infosys InStep, Bangalore
  REST Framework for Named Entity Extraction — *Summer 2017*
  - Built a scalable RESTful API Service to perform NER, and return performance metrics such as Recall & Precision, using custom models. To be used by Infosys and its clients
  - Extensively experimented with Python Libraries RasaNLU, StanfordNER, MITIE, Spacy, etc.
  - Used Spacy for NER, Flask for server management & Flaskrest-Plus for API documentation
- **Web Developer** — Goodera, Bangalore
  Dashboard Development in JavaScript — *Summer 2016*
  - Developed Dashboards, which contain Cards & interactive Charts & Tables, to represent clientele's individual investment & impact on the CSR sector
  - Extensive use of JS and its Libraries (C3, Jinq, Moment, etc.) for data analysis and presentation & AdminLTE Template for webpage layout

Projects

- **Operating System - xv6** — IIT Delhi
  course project under Prof. Sourav Bansal — *Jan 2017 - May 2017*
  - Built a Shell based Kernel. Supported basic I/O & preemptive & non-preemptive threads using coroutines and fiber
  - Implemented Leslie Lamport's SPSC queue to exchange messages between 2 cores. Written in C & x86
- **World Development Indicator** — IIT Delhi
  course project under Prof. Maya Ramanath — *March 2017 - April 2017*
  - Database Driven info-graphic website representing indicators of development from hundreds of countries
  - Relational Database concepts, PostgreSQL, HTML/CSS, JS & PHP were used

- **Parallel Genetic Solution to TSP** IIT Delhi
  course project under Prof. Subodh Sharma *Feb 2017 - March 2017*
  - Implemented a Parallel Solution to the Travelling Salesman Problem using OpenMP (C++)
  - Experimented with Crossover (Genetic Algorithm) techniques - Partially Mapped Crossover, Cycle Crossover & Edge Recombination Crossover
- **Machine Learning** IIT Delhi
  course projects under Prof. Parag Singla *Jan 2017 - May 2017*
  - Built a Neural Network to predict the final game outcome from a given intermediate board configuration of Connect-4
  - Used Support Vector Machines (Linear & Gaussian Kernels) to classify Attractive Faces
  - Used PCA in a Facial Recognition Software to greatly reduce the feature space
- **Artificial Game Player for TAK** IIT Delhi
  course project under Prof. Mausam *July 2016 - Sept 2016*
  - Designed a bot for the Real Time Strategy Game, TAK, using Adversarial Search
  - Used Alpha-Beta Pruning, Transposition Table & GA to improve time & evaluation function
- **Elevator Simulation Model** IIT Delhi
  course project under Prof. Mausam *Aug 2016 - Nov 2016*
  - Simulate an Elevator's Motion to optimize total electricity consumption and total waiting time
  - Modeled the Problem as a Markov Decision Process. Implemented the UCT Algorithm with function approximation & memory optimization to manage such a huge state space

IIT Delhi Thesis

- **Software Defined Networks & Virtualization** IIT Delhi
  thesis under Prof. Suresh Chand Gupta *July 2017 - Present*
  - Adapt inspiring features of various reliable & scalable cloud solutions like Azure, AWS & GCP to Baadal (IITD's Cloud Service)
  - Specifically, use modern & innovative SDN & NFV implementations of these services to improve Baadal

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

Programming Skills

Extensive	Java, JavaScript, Python, C++, PostgreSQL
Intermediate	ARM/X86 Assembly, SML, VHDL, Matlab, HTML/CSS
Basic	Shell Script, PHP