

Srinivas Reddy M *August 17, 1995*

UG (3rd year), Computer Science and Engineering
Indian Institute of Technology Kharagpur

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Education

Indian Institute of Technology Kharagpur	WEST BENGAL, INDIA
Bachelor degree in Computer Science & Engineering Focussed mainly on Machine Learning, Cryptography.	2012 – 2017 (expected) GPA: 7.64/10.00
SR Educational Academy	2010 – 2012
Intermediate Education (pre-university secondary education)	94.5 %
Adarsha High School	1999 – 2010
SSC (Secondary Schooling)	92.5 %

Projects

MACHINE LEARNING	CLIMATIC ANALYSIS
Cyclone track-intensity Prediction Identifying features and ordered temporal motifs from multi-dimensional temporal streams of meteorological data related to the tropical cyclones, predicting cyclone Intensity and path. Models: Decision trees, Kalman filters, Genetic Algorithms, Regression, SVM, Artificial Neural Nets, and Recurrent Neural Nets. Guide: Dr. Sudeshna Sarkar , IIT Kharagpur.	<i>Apr '14 – Apr '15</i> Techs Used: R, Matlab.
Rainfall Variation over India Finding patterns in temporally and spatially distributed of rainfall data. Account for the climatic changes like loss of mangroove forest cover, changes in temperature, rainfall amount and distribution. Models: Genetic Algorithms, Regression, SVM, Artificial Neural Nets. Guide: Dr. Pabitra Mitra , IIT Kharagpur.	<i>May '14 – Apr '15</i> Techs Used: R, Matlab.
CRYPTOGRAPHY	CRYPTANALYSIS
Parallelising Coppersmith's discrete log algorithm Implementing Gordon And McCurley's Polynomial Sieving efficiently, then parallelising and solving the discrete log problem effeciently. As all the public key crypto systems are based on computational infeasibility of discrete log problem work on this area is bound to be crucial and promising. Models: Gordon And McCurley's Polynomial Sieving. Guide: Dr. Abhijit Das , IIT Kharagpur.	<i>Apr '15 – Present</i> Techs Used: C, CUDA.
INFORMATION RETRIEVAL	RETRIEVAL MODELS
Optimised Information Storage and Retrieval Implemented IR models for a machine local search engine to search 1.3 million TREC (Text Retrieval Conference) Documents. Compared and Evaluated various methods using TREC Queries, ranked in terms of mean average precision values. Models: Boolean Model, Vector Space Model, Probabilistic relevance model on which is based the okapi (BM25) relevance function, Language Model. Guide: Dr. Pawan Goyal, IIT Kharagpur.	<i>Mar '14 – Jun '14</i> Techs Used: Java, Apache-Leucene.
ACADEMIC PROJECTS	PART OF ACADEMIC CURRICULA
Automated software for a motor part Store Inventory management using just-in-time (JIT) philosophy , Database management. Detailed reports on future requirements , monthly sales, feedback and managing users. Guide: Dr. Partha Pratim Das, IIT Kharagpur.	<i>Mar '14 – Jun '14</i> Techs Used: Java, MySQL.
Synthesis of 32-bit processor on FPGA Designed a MIPS like ISA and used it to synthesize a 32-bit processor on FPGA.Support for Recursion using a hardware stack was also provided. Guide: Dr. Ajit Pal, IIT Kharagpur.	<i>August '15 – Nov'15</i> Techs Used: Xilinx.
Tiny C Compiler Considering a subset of gnu functionalities this compiler can generate correct executable code given a C program as input. Guide: Dr. Partha Pratim Das, IIT Kharagpur.	<i>August '15 – Nov'15</i> Techs Used: Flex, Bison.

Please refer to my Webpage for the complete list of work experiences along with recommendations.

Technical Skills

Advanced: C, C++, Java, Python.
Intermediate: CUDA, Matlab.
Basic: JavaScript, HTML5, CSS3.
Platforms: Linux, Solaris and Windows.

Scholastic Achievements and Position of Responsibility

Rank of Cadet Sergeant: 2014
Awarded by 3(B) Tech air SQN NCC, India for utmost Sincerity, Discipline, and Dedication.
It is Awarded as Recognition for Leadership Qualities of an individual.

IIT Joint Entrance Examination (IITJEE): 2012
All India Rank - 638 in General category among half a million candidates.

Best Outgoing Student: 2010
Best Student Award at Adarsha High School, Warangal for Best in Character, Academics and Leadership.

Scholastic Achievements and Position of Responsibility

- Second Senate Member at Lal Bahadur Shastri Hall of Residence, IIT Kharagpur. 2015 – Present
- Squadron Senior man at 3(B) Tech Air SQN NCC, India. 2012 – 2014
- C-certificate holder in National Cadet Corps, India. 2014
- Diploma in Computer Applications from Mind soft Institutions. 2010