Ballijepalli Shreya

Indian Institute of Technology Hyderabad 4th year Undergraduate Department of Computer Science and Engineering $Email:cs15btech11009@iith.ac.in\\ Phone number: +91~8500106480$

EDUCATION

Indian Institute of Technology Hyderabad, Computer Science and Engineering

CGPA: 8.65/10

Telangana State Board of Intermediate education

Percentage: 98.3%

All India Secondary School Examination by CBSE

CGPA : 10/10

ACADEMIC HIGHLIGHTS

- Qualified for the award of Scholarship for Higher Education under innovation in science Pursuit for Inspired Research (INSPIRE) by virtue of performance being within top 1% of the Telangana State Board of Intermediate Education, Hyderabad
- Secured AIR 828 in JEE Advanced 2015 exam
- Secured third rank in AP state in International Olympiad of Science 2011
- Secured 52cnd rank in International Maths Olympiad 2015

POSITIONS OF RESPONSIBILITY

- Web Coordinator for NSS (National Service Scheme), IIT Hyderabad (August 2017 May 2018)
- Teaching Assistant for the course Discrete Structures-I (August 2018 Present)
- Teaching Assistant for the course Principles of Programming Languages-II (January 2018 May 2018)
- Teaching Assistant for the course Principles of Programming Languages-I (October 2017- December 2017)
- Teaching Assistant for the course Discrete Structures-I (August 2017- October 2017)

PROJECTS

Internship at Swiggy

May 2018 - July 2018

· I was a part of the data platform team. I built a Query Analyzer that can be used to detect the cost of sql queries and can also be used as a bad query detector.

Short text Clustering

January 2018 - May 2018

· The aim of this project was to improve the performance of short text clustering by exploiting the internal semantics from the original text and external concepts from world knowledge like Wikipedia and Wordnet. The accuracy using this method proved to be much better than other state-of-art methods.

· Built a cool compiler as a part of Compilers-II course. This includes a lexer, parser, semantic analyzer and a code generator for cool written in java.

Parallel Bellman-Ford Algorithm

August 2017 - October 2017

 Parallelized Bellman-Ford single source shortest path algorithm by using fine grained synchronization, dynamic allocation of vertices to threads and using techniques to reduce the number of computations.

IBM Remote project - Business Visibility Bot

May 2017 - July 2017

· The aim of the project was to create a chatbot with conversation service and personalization. This chatbot has natural language understanding and can answer questions regarding clients in a particular database. Each user also gets recommendations on the type of questions they can ask. Used IBM Watson conversation API and LDAP authentication for creating the chatbot.

Summer Project - Study on Document Categorization

May 2017 - July 2017

Summer project under Dr Maunendra Sankar Desarkar, Assistant Professor, IIT Hyderabad

· Studied various feature selection techniques like chi-square and entropy-based techniques for document classification. Worked on the newspaper articles from the Times of India using Naive Bayes Classifier for the study.

Net banking website using Haskell

March 2017- April 2017

· Developed a net-banking web application in Haskell using yesod framework, javascript and shake-spearean templates of haskell. Atomic locks are used to prevent data racing and deadlock. Used Sqlite3 database and persistent to act as an interface between the application and the database.

Semaphores in Minix

March 2017 - April 2017

· Implemented semaphores in minix operating system as a system call.

Concurrency based 2-D game in C++

February 2017 - March 2017

· Developed a Mario type game in C++ using SFML graphics. The game also includes the concurrency features of C++11.

Research Internship

August 2016 - December 2016

Research Intern under Dr Maunendra Sankar Desarkar, Assistant Professor, IIT Hyderabad

· Created a metasearch engine using the data of various other search engines. Used various rank aggregation methods in the implementation of the meta search engine.

Face detection System

November 2015 - January 2016

· Developed a face detection system in MATLAB as a part of Independent project course.

3-D Printing Model Project

August 2015 - November 2015

· As a part of Digital Fabrication course, designed a 3D model in Solid Edge and printed it using 3D printers

TECHNICAL SKILLS

Programming Languages

Basic Understanding Software & Tools C,C++,Python,Java

Nodejs, HTML, CSS, Go, Haskell, MATLAB, MIPS

Intellij IDEA, MS Office, SFML Graphics, Github, Linux

COURSEWORK

Information Retrieval(Ongoing)
Topics in DBMS(Ongoing)

Data Mining

Applied Machine learning

Theory of Computation

Algorithms and Data Structures

GIAN course on GPUs and Accelerators

Principles of Programming Languages

Optimization Techniques Computer Architecture

Statistics

Visual Big Data Analytics(Ongoing)
Distributed Computing(Ongoing)
Database Management Systems

Parallel and Concurrent Programming

Networks

Operating Systems I/II

Compilers

Introduction to Complexity Theory

Discrete Structures I/II

Probability Linear Algebra

ACTIVITIES

- Member of Google Women Techmakers India community
- Member of National Service Scheme, IIT Hyderabad
- Member of Vibes, IIT Hyderabad