Shashikanth Reddy Potu | CS14B020

Indian Institute of Technology Madras
Placement Registration Number : 11/CS/18/018

Education

Program	Institution	%/CGPA	Year of Passing
B.Tech Computer Science and Engineering	Indian Institute of Technology Madras Chennai	**8.03**	2018
XIIth Std. Board of Intermediate Education, AP	Sri Chaitanya Narayana Jnr College Vijayawada	**97.1**	2014
Xth Std. Andhra Pradesh State Board	Dr.KKR's Gowtham Concept School Hyderabad	**9.8**	2012

Scholastic Achievements

- Secured All India Rank **115** in JEE Advanced 2014 amongst 0.15 million people.
- Secured State Rank **36** in AP-EAMCET 2014 among 3.5 lakh students.
- Secured **430/450** in BITSAT 2014.
- Secured District **Second** rank in Ramanujan Talent Test 2012 (Xth class).
- Secured All India Rank **11B** in AMTI 2010 (National Mathematics Talent Test).

Professional Experience

Goldman Sachs **May - July 2017**
Summer Strats Intern

- Worked on optimizing the memory usage and time taken for an important process by analyzing the profiling of the memory usage and modifying the architecture and thus reducing memory usage by **1.3GB** and time taken to **20%**.

RapidBizApps **May - July 2016**
Member of Technical Staff Intern

- Worked on automating the migration of apps hosted by Parse(which is going to be shut down) thus saving the time for manual migration of many apps.

Course and Lab Projects

Interactive Desktop Assistant for Ubuntu **July - Nov 2016**
Independent Group Project
Wit.Ai, Sys calls, Stackoverflow API, Wiki API, AngularJs, Bootstrap

Developed an ubuntu virtual assistant that can perform tasks or services like playing media, searching file locations, display wiki info, stack overflow suggestions and opening software applications.

When Bus Android App **Jan - May 2017**
Software Engineering Course Group Project
Scrapping, Android Studio, GMaps services, MongoDB, NodeJs

Developed an android app for the MTC Chennai bus service which suggests the user, buses to board, displays the real time location of bus and also predicts the time in which the bus arrives using crowd-sourcing.

Othello Game Bot **July - Nov 2016**
Artificial Intelligence Course Project

Designed a Bot for playing Othello board game which competed against other bots to finish fifth in the contest. Implemented Alpha-Beta Pruning algorithm for searching best possible moves in limited time for each step.

Line Follower Bot **Jan - May 2015**

Independent Group Project

Designed an arduino based autonomous line follower robot which is able to detect the fixed track and keep following it, which won the contest conducted by Robotics Club.

Path Planning **Jan - May 2017**

Reinforcement Learning

Implemented Q-Learning, Sarsa learning algorithms on a puddle world(where the state space is huge), to learn the best policy in less time so as to drive the agent towards the goal with minimum number of steps and avoiding puddle areas.

Mail Spam Filter **July - Nov 2016**

Machine Learning

Implemented a Bayesian Spam Filter that classifies email messages as either spam (unwanted) or ham (useful), assuming Multinomial, Bernoulli distributions to get 96% accuracy in classification.

JOS Operating System & Dummy Shell **July - Nov 2016**

Operating Systems Lab

Worked on different components of the JOS Operating System such as memory management, user environment, preemptive multitasking etc. Also implemented a bash like shell with minimal grammar which supports operations like pipes, background jobs, list of jobs executions, redirection between jobs and files etc.

Parallel Sudoku and Maze Solvers **July - Nov 2017**

GPU Programming

Developed Cuda algorithms that can solve a Sudoku and find minimum path in a Maze which make use of GPU to distribute the work parallely and thus reducing the average time taken to 17% in case of hard Sudokus.

Skills and Tools

Programming Languages: C, Java, C++, Python, Cuda.(Comfortable picking up any language when needed).

Web Development: HTML, CSS, Bootsrap, MEAN Stack.

Tools: Git/GitHub, Eclipse, Android Studio, Weka, Protege Ontology Editor, Latex.

(I have working experience with every skill/tool mentioned above, not an expert though.)

Relevant Courses

CS Electives: Machine Learning, Artificial Intelligence, Reinforcement Learning, GPU Programming, Theory of Ontologies, Approximation Algorithms.

CS Core: Data Structures and Algorithms, Paradigms of Programming, Computer Organization, Operating Systems, Compiler Design, Computer Networks, Introduction to DBMS, Software Engineering.

Mathematics and Foundation: Graph Theory, Linear Algebra, Probability and Statistics, Discrete Maths, Languages Machines and Computation, Switching Theory.

Positions of Responsibility

- Event Coordinator of Tidbits, a coding and puzzling event at Shaastra-2016, the annual Technical fest of IIT Madras. Led a team of four members, prepared lateral thinking puzzles and organized contest.

Extra - Curricular Activities

- Won Gold in Schroeter Cricket Tournament 2015.
- Part of NCC, IIT Madras (2014 - 2015).