



## **OBJECTIVE**

Pursuing growth in my skillset and knowledge in the field of systems architecture and artificial intelligence by means of higher education and research experience.

## **EDUCATION**

**Georgia Institute of Technology, Atlanta, GA**

**Aug 2016 - May 2020**

Bachelor of Science in Computer Science

**Aditya Birla World Academy, Mumbai, India**

**Jul 2010 - Jun 2016**

- International Baccalaureate (IB) Diploma with Mathematics, Computer Science and Physics as Higher Level subjects.
- Cambridge IGCSE: Awarded Cambridge International Certificate of Education (ICE) with Distinction

## **ACADEMIC ACHIEVEMENTS**

**Faculty Honors**

**Fall 2018**

Received a Faculty Honors Award for a 4.0 GPA during the Fall 2018 academic semester

**Dean's List**

**Fall 2016, Fall 2017, Spring 2019, Fall 2019**

Received a Dean's List Award for a minimum of a 3.0 GPA in the listed academic semesters

## **SKILLS**

**Programming Languages:** Java, C, C++, Python, HTML, CSS, JavaScript, Perl, x86 Assembly, Ruby, Verilog, VHDL

**Hardware:** Altera FPGA Boards, Raspberry Pi, Bread Board and Sensor Programming and Polling, Telemetry Communication, Hardware In-Loop Simulations

**Other Skills:** Git, CircuitSim, Wireshark, Intel Quartus Prime

**Subject Knowledge:** Processor Design, Computer Organization and Architecture, Networks, Operating Systems Design, Knowledge-Based Artificial Intelligence, Natural Language Processing, Linear Programming, Data Structures and Algorithms, Web Development, Agile Methodology

## **INDUSTRY EXPERIENCE**

**Oracle Corporation**

**Summer 2017**

Interned in the Oracle Banking Platform-Development Group in the field of data storage security and data transfer security. Developed and deployed a network security and efficiency analysis tool for Oracle's intranet to all Asia-Pacific data centers.

**CBRE South Asia Private Limited - CISCO joint project**

**Summer 2015**

Interned in CBRE's joint-development project with CISCO for creating sustainable, intelligent buildings.

Worked on IoT devices with intelligent communications mainframe to sync IoT devices to the central management system.

## **RESEARCH EXPERIENCE**

### **High Performance Architecture Research Lab**

**Fall 2019 - Spring 2020**

Worked under Dr. Hyesoon Kim and Mr. Ramyad Hadidi as an undergraduate researcher at the Georgia Institute of Technology.

Leading a team that is working on creating custom performance cognitive models for drones using ArduPilot and DroneKit.

## **PROJECTS**

### **FPGA Robot Arm Control**

**Fall 2019**

Developed Verilog code for the Altera DE0 FPGA which utilized closed feedback-loops to control multiple DC servos in the MeArm robot arm.

### **Virtual Syllabus Agent using NLP and KBAI**

**Fall 2019**

Developed a python agent which can input questions asked from users and use NLP to decode the question.

The agent is also able to learn using Incremental Concept Learning and is able to use Thematic Roles to reply to the user.

### **Dynamic A\* Path Planning on NavMesh map**

**Summer 2019**

Developed an agent which implements A\* path planning on a NavMesh map with dynamic obstacles.

### **E1000 x86 Network Driver for xv6**

**Spring 2019**

Developed a network driver for the e1000 NIC for the xv6 operating system.

This network driver (written in ANSI C) enabled the communication between multiple simultaneous instances of the xv6 shell.

### **Text Editor for xv6**

**Spring 2019**

Developed a text editor (with custom system calls added) for the xv6 operating system.

### **Multi-layered Neural Net with Back Propagation**

**Fall 2018**

Developed a multi-layered Neural Net with feed-forward processing of inputs and back propagation to update network weight.

The perceptrons' weight was also updated using a Sigmoid function and update.

### **Anki Cozmo Facial Recognition**

**Summer 2018**

Developed facial recognition software and sequences for the Anki Cozmo programmable robot.

## **ACTIVITIES AND LEADERSHIP**

- Member of LUG@GT (Linux Users Group)
- IEEE Active Member
- Member of the Georgia Tech Astronomy Club
- Hall council floor representative
- Active volunteer in community service with the Trees Atlanta non-profit organization
- Recreational soccer player, golfer and PC builder