

<https://github.com/sethiparth>

Education

Master of Science	University of Florida, Gainesville, FL	Aug 2017 – Dec 2018
<ul style="list-style-type: none"> Major: Computer Science. GPA: 3.56/ 4 Coursework: Advanced Data Structures, Programming Language Principles, Analysis of Algorithms, Database Management Systems, Computer Networks, Computer Architecture Gator VR Club; Academic Achiever Award - 2017 		
Bachelor of Technology	Jaypee University of Information & Technology, Solan, India	Aug 2013 – May 2017
<ul style="list-style-type: none"> Major: Electronics and Communication. GPA: 9.1/ 10 Coursework: Object oriented programming, Operating Systems, Project Management, Telecommunication Networks. 		

Experience

Software Engineer	OM Partners, Atlanta, GA	Feb 2019 – Present
<ul style="list-style-type: none"> Improving and Integrating additional functionalities towards their framework for Supply chain management software “OMP Plus”. Implementing optimization strategies using C++17 to improve “OPAL” which is a customized language to implement supply chain inventory management and logistics. <u>Leveraged knowledge:</u> C++17, Testsuite, SVN, OPAL(custom grown compiler) 		
Teacher's Assistant	University of Florida, Gainesville, FL	Aug 2018 – Dec 2018
<ul style="list-style-type: none"> Served as a teacher's assistant for a course Database Management Systems for a class of 30 students. Helped students develop projects using oracle database as their semester long projects. <u>Leveraged knowledge:</u> SQL, Oracle 		
Software Intern	Texas Instruments NSIT, Delhi, India	May 2015 – July 2015
<ul style="list-style-type: none"> Developed an algorithm in C to show animations over oscilloscope to create a working television with help of digital signal controller. Utilized I2C protocol to establish connection between controller and the oscilloscope for x & y axes to produce animations. <u>Leveraged knowledge:</u> C, Digital Signal Processing, C2000 controller 		
Software Intern	NIIT, India	May 2014 – July 2014
<ul style="list-style-type: none"> Developed an auction related sale and an e-bank system interfaces in Java using SQL databases for user accounts and trading information in Java. <u>Leveraged knowledge:</u> Java, SQL 		

Publications

“Alternate ethos of intelligence: humanoid robot – “ENQUETE”	SPIN conference 2017
<ul style="list-style-type: none"> Developed a handheld controlled robot that mimics human gait, collecting surrounding data with help of various sensors. 	
“Sign Language Analysis and Recognition to Aid Specially Abled Communicators”	IEEE conference INDIACOM 2017
<ul style="list-style-type: none"> Designed and published a research paper on a glove that translates American sign language to English verbal speech. 	
“Safe Sole Distress Alarm System for female security Using IoT”	Springer 2017
<ul style="list-style-type: none"> Developed a shoe sole that sends SoS signals when tapped hard on ground multiple times with various safety features such as alarm and a shoe taser. 	

Skills

Software: [proficient] Java, C++, SQL, Visual Studio [familiar] HTML, CSS, JavaScript, Git

Projects

Personal Website: https://sethiparth.github.io/ (for additional information and projects)		
JAVA based Compiler Design	Java, ASM, JVM Bytecode, Junit	Jan 2018 – May 2018
<ul style="list-style-type: none"> Implemented a scanner using a top-down parser based on custom grammar to implement a strongly-typed programming language, using visitor pattern for type checking. 		
P2P File Sharing Software	Java	Jan 2018 – May 2018
<ul style="list-style-type: none"> Implemented a P2P file sharing system similar to BitTorrent for file management operations between peers. Improved download speed across different computers by 50 % by using special message types for choking and unchoking. 		
Gator Zone	SQL, Database	Jan 2018 – May 2018
<ul style="list-style-type: none"> Designed a website for e-shopping with features for suggestions and trending new products using graphs and pi charts in the market. Used oracle service for back end SQL database. 		
MIPS simulator – Tomasulo algorithm	C++	Aug 2017 – Dec 2017
<ul style="list-style-type: none"> Implemented Tomasulo's algorithm to schedule and execute MIPS commands in out of order execution fashion using multithreading and file handling in java. 		
Data compression algorithm	C++	Jan 2017 – May 2017
<ul style="list-style-type: none"> Implemented Huffman encoding technique to compress a binary file and used a cache optimized 4-way min heap for decoding the given file efficiently by 80%. 		