Ratan George Senapathy

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OBJECTIVE

Hardworking Computer Science graduate student with leadership skills and global experience seeking a challenging position in software engineering at a leading software development company

EDUCATION

University of Southern California (USC), California (GPA: 3.75/4.00) **May 2018 Candidate**
Master of Science in Computer Science
Manipal Institute of Technology, Manipal, India (GPA: 8.56/10.00) **May 2016**
Bachelor of Technology in Computer Science and Engineering

SKILLS

Languages	:	PHP, JavaScript, HTML, CSS, Java, C# (certified), Python, SQL, MYSQL, TSQL, C++, Haskell,
Libraries/Frameworks	:	AngularJS, Scrapy, jQuery, Bootstrap, CodeIgniter, ReactJS, Cloudsight API, Deepomatic API
Software/Tools	:	Github, Perforce, Visual Studio, Android Studio, Xcode, Sublime, MS Office, Unity
Operating Systems	:	Windows, Ubuntu, Mac OS
Services/Protocols	:	AWS, Microsoft Azure, REST APIs

WORK EXPERIENCE

Frenzy.AI, Los Angeles, United States **Jan 2017 - Present**
Position: CTO
- Currently in charge of the Los Angeles office and collaborating with various teams to release fashion detection API into production
- Working as a full stack developer, took initiative to increase API accuracy of scrapping product details in a blog by 20%
- Integrated cloudsight and deepomatic APIs in PHP using CodeIgniter framework for image recognition, worked with MYSQL
- Set up AWS EC2 instances and Azure virtual machines and wrote scripts to use S3 storage on AWS
- Currently working here while pursuing my Master's degree
- Inventor in the patent application for the fashion detection API

SanDisk India Device Design Centre Ltd, Bengaluru, India **Jan 2016 - May 2016**
Position: Intern
- Designed python based tracking tool to track invalid execution paths in firmware for more efficient firmware testing
- Reduced debugging time by 8% - 10%

Microsoft, Hyderabad, India **June 2015 - July 2015**
Position: Intern
- Designed and developed a user friendly data tracking tool in C# and WPF to detect job failure on SQL Server
- Gave a visual representation of the job and database status, reducing number of work hours for searching for various errors by 20%
- Took the initiative to design a more detailed graphical report generation mechanism for the tool

Parkyeri, Istanbul, Turkey **June 2014 - July 2014**
Position: International Intern
- Wrote java servlets for a 3D online world during an international internship opportunity in Istanbul
- Linked various java libraries together and documented various relationships and interactions between libraries

PROJECTS

Computer Graphics Engine (Graphics Engine) **Aug 2016 - Dec 2016**
- Created a basic 3D graphics engine for a class project in visual studio and C++
- Programmed frame buffers, model view to screen view conversion algorithms, flat/gouraud/phong shading mechanisms, performed texture mapping both from a texture image and procedurally and wrote an antialiasing algorithm
- Reimplemented the entire system to use deferred rendering as part of a team project using OpenGL and C++

Game Engine Architecture (PrimeEngine) **Aug 2017 - Present**
- PrimeEngine is a game engine made by a graduate course professor
- Implementing parts of the game engine like bounding volumes, frustum culling, mesh loading and physics in C++ using Visual Studio
- Generated navigation mesh and wrote traversal code for it using A* search

Networked Game (Unity) **Aug 2017 - Present**
- Currently the team leader in charge of making a multiplayer online FPS game, and assigned work to team members, reviewed code and integrated changes
- Working with transport layer protocols to implement the network architecture and implemented event handling over the network
- Reduced latency by using dead reckoning

Programming Language (First Order Logic Programming Language) **Oct 2016 - Dec 2016**
- Validates queries based on facts given as input using resolution algorithm
- Designed the lexical analyzer, syntax analyzer and semantic analyzer using Java and innovated a more effective design of the interpreter

Board Game (Java) **Sept 2016 - Oct 2016**
- Created a 2 player board game with AI agent that can play the game using MINIMAX and Alpha-Beta pruning algorithms