Ratan George Senapathy

909-735-0445, ratangsenapathy@gmail.com
www.linkedin.com/in/ratangsenapathy, Portfolio: ratangsenapathy.github.io
1210 W. Adams Blvd., Apt #101, Los Angeles, CA, 90007

EDUCATION

University of Southern California (USC), California (GPA: 3.75/4.0) **May 2018 Candidate**
Master of Science in Computer Science
Relevant Coursework: Web Technologies, Networked Games, Foundations of Artificial Intelligence, 3D Graphics and Rendering, Algorithms, Game Engine Development

Manipal Institute of Technology, Karnataka, India (GPA:8.56/10.0) **May 2016**
Bachelors of Technology in Computer Science and Engineering
Relevant Coursework: Advanced Internet Technologies, Computer Graphics, Data Structures using C

SKILLS

Languages: Java, C++, C#(certified), PHP, Javascript, Python, HTML, CSS, Haskell, SQL, MYSQL, TSQL
Libraries/Frameworks: jQuery, OpenGL, AngularJS, Cocos2dx, Scrapy, Cloudsight API, Deepomatic API, ReactJS, Bootstrap
Softwares/Tools: Unity, Android Studio, Xcode, Perforce, Github, Visual Studio, Sublime, Blender, Maya, Microsoft Office
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: Computer Vision Engineer

- Currently in charge of the Los Angeles office and is collaborating with various teams to release the API into production
- Took initiative to accuracy of fashion detection API that returns information about products pictured in a blog or an image by 20%
- Integrated cloudsight and deepomatic APIs in PHP and codeigniter framework for image recognition, worked on the company's API to fetch and update data from MYSQL database, set up servers on AWS and Azure and wrote scripts to use S3 storage on AWS
- Currently working there while doing my masters and is an inventor in the patent application for the 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 IT, 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 and gave a visual representation of the job and database status which reduced number of work hours for searching for various errors by around 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

- Linked various java libraries together, documented various relationships and interactions between libraries and wrote java servlets for a 3D online world during an international internship opportunity in Istanbul

PROJECTS

Facebook Search (Website + Android) **March 2017 - May 2017**

- Created a website in php, javascript, jQuery and angularJS and called FB and Google maps API to get details about various FB pages and implemented REST APIs for it
- Made android app that used the REST API to fetch details from the website and display on the app

Networked Game (Unity) **Aug 2017 - Present**

- Currently the team leader in charge of making a multiplayer online FPS game for a graduate course and regularly assigned work to team members, reviewed the code and integrated changes together
- Working with transport layer protocols instead of the high level api to implement the networking feature of the game
- Reduced latency by using dead reckoning and in the process of implementing voice over IP

Programming Language (First Order Logic Programming Language) **Oct 2016 - Dec 2016**

- It validates or invalidates queries based on facts given as input using resolution algorithm
- Designed the lexical analyser, syntax analyser and semantic analyser using java and was able to think outside the box to design the interpreter in a more effective way

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 and phong shading mechanisms, performed texture mapping both from a texture image and procedurally, wrote an antialiasing algorithm and implemented deferred rendering as an extension of the project along with team members