Ryan Senanayake

rsen@mit.edu RSenApps.com | Github.com/RSenApps

Education Massachusetts Institute of Technology (4.9 GPA) Cambridge, MA

Candidate for Bachelor of Science in Computer Science and Engineering

Sept 2015 - May 2019

Working towards concurrent Masters in Engineering with a concentration in Computer Systems

Relevant Coursework: Distributed Systems, Computer Systems Security, Multicore Programming, Operating Systems, Computer System Engineering, Computer Vision, Design and Analysis of Algorithms, Computation

Structures, and Artificial Intelligence

Skills Languages: C++, C, Python, Java, Go, Assembly, node.js, Matlab, PHP, Javascript, SQL, bash, C#, Objective-C

Platforms: Android, iOS, Windows, Unity, Tensorflow

MIT Compiler Research Group (COMMIT) Experience

Cambridge, MA

Research Assistant

December 2017 – Present

• Added support for complex numbers and dynamically typed tensors for the Tensor Algebra Compiler project

Singular Computing LLC

Cambridge, MA

Software Engineer

June 2016 - December 2017

- Built several projects in C and Assembly to run on a massively-parallel approximate-arithmetic SIMD mesh
- Developed a framework to run neural networks and perform real-time ImageNet classification in .04W/fps
- Designed and implemented an algorithm to parallelize neural network training for speech recognition
- Built a genetic programming framework which included manipulating genome trees in Assembly
- Created a real-time optical flow computer vision demo that ran at 50 FPS and only used 0.25W

RSenApps Inc Seattle, WA

CEO, Founder January 2012 - Present

- Developed 12 published Android apps, which generated \$60k+ in revenue
- Open Mic+ has 4 million downloads and was featured on XDA and LifeHacker
- · Commandr has 1.5 million downloads and was featured on CNET, XDA, and LifeHacker
- Commandr was selected for Android Authority's 10 Best Android Apps of 2014

Meta Company Redwood Shores, CA

Prototype Engineer Intern

January 2016

- Prototyped interactions in augmented reality reporting to the VP of UX in Unity and C#
- Implemented computer vision algorithms in C#
- Offered full-time employment through spring semester and summer of 2016

Prose LLC Seattle, WA

Android Developer

June 2015 - January 2016

- Wrote all of the code to port the iOS app to Android
- · Features included infinite scrolling, socket-based messaging, push notifications, and offline caching

Hackathons

Facebook Global Hackathon Finals 2015 (Qualified: YHacks at Yale University)

Menlo Park, CA November 2015

Awards: Facebook Global Hackathon Finalist and Top 8, Best Facebook Hack at YHacks Project: Real-time synced lyrics and song information in Augmented Reality and Android

Qualifying project: Facial recognition and Eulerian Video Magnification for heart rate detection in AR

Contribution: All Android code in Java and augmented reality backend code in Unity and C#

TreeHacks at Stanford University

Stanford, CA February 2015

Awards: 2nd Place in Crowd Vote and Best Augmented Reality Hack Project: Android as a hologram with the Meta Augmented Reality goggles

Contribution: All of the augmented reality code in Unity, C#, and C++

Dubhacks at University of Washington

Seattle, WA

Awards: 2nd Place and Best Microsoft Hack

October 2014

Project: Background traffic rerouting for Android, Android Wear, Google Glass,

and Windows Phone utilizing geofencing, context detection, and route matching to run without user input

Contribution: All of the Android, Android Wear, and Google Glass code in Java