Ryan Senanayake

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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

Experience

MIT Compiler Research Group (COMMIT) — **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**
Awards: Facebook Global Hackathon Finalist and Top 8, Best Facebook Hack at YHacks — November 2015
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**
Awards: 2nd Place in Crowd Vote and Best Augmented Reality Hack — February 2015
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