

Brian Fischer
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EXPERIENCE

- Performance Engineer** July 2018 – Present
Apple Inc – Sunnyvale, CA
- Responsible for maintaining and improving software performance of RealityKit, Reality Composer, and 3D Engine
- Software Engineer** August 2015 – June 2018
Belvedere Trading LLC – Chicago, IL
- Improved performance and latency of C++ trading algorithms
 - Led and mentored interns developing an exchange simulator
 - Moved trade persistence from SQL to in house CQRS-ES event store
 - Implemented dynamic option strategy naming
 - Designed and developed tool to view and filter live market trades
 - Developed C# service endpoint discovery tool
 - Used WPF and MVVM patterns for UI enhancements and functionality improvements of internal apps
- Research Assistant** May 2015 – July 2015
CMU Human Computer Interaction Institute – Pittsburgh, PA
- Implemented a mixed reality educational game that teaches principles of balance and stability
 - Play tested at The Children's Museum of Pittsburgh and refined based on feedback
- Software Engineering Intern** June 2014 – August 2014
Belvedere Trading LLC – Chicago, IL
- Developed market trade data collectors and validators for the data team
 - Implemented an Option Greeks visualization tool using rCharts and Shiny
- Research Assistant** May 2013 – August 2013
CMU Language Technologies Institute – Pittsburgh, PA
- Developed prototype for The Speech Recognition Virtual Kitchen, an online community focused on lowering the entry level to speech recognition by providing users with Virtual Machines that provide a consistent environment for experimentation. Displayed at the Show & Tell Demo of Interspeech 2013

PROJECTS

- Hexicon** June 2017 – June 2018
- Programming player controls, UI, and core gameplay functionality for a mobile word territory game
- Sudoku in Pieces** Feb 2015 – March 2015
- Programmed board generation, player controls, and gameplay logic for a jigsaw Sudoku variant
- Computer Graphics** September 2014 – May 2015
- CUDA Renderer
 - Parallel BVH Construction via Approximate Agglomerative Clustering
 - Parallel Sort-Middle Tiled Renderer
 - Barrel Distortion Ray Caster for the Oculus Rift in Javascript

EDUCATION

- Depaul University** – Chicago, IL Class of 2023
M.S. Game Programming
- Carnegie Mellon University** – Pittsburgh, PA Class of 2016
B.S. Computer Science; Minor in Japanese Studies

SKILLS

- Programming Languages/Tools**
- Experienced with C++, C#, WPF, Git
 - Familiar with Python, Unity, Java, Objective C, Swift