Lucas Rumney

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Objective

Apply my passion for engineering to a role focused on interactive application, engine, or graphics development.

Experience

Croquet — Unity Product Engineering Manager (Jan 2023 - Sept 2023)

At Croquet, a startup focused on replicated simulation for interactive JavaScript applications, I owned every aspect of the Croquet for Unity Product.

- Created a redistributable, versioned, fully documented messaging bridge from Unity (C#) to Croquet (JavaScript)
- Wrote prototypes, tutorial projects, example projects demonstrating the advantages of replicated simulation
- Performed project planning, lead the project team by holding meetings, exposing regular progress updates
- Organized playtesting, community support, marketing, attended business conventions, provided direct studio and B2B support and regularly scheduled remote classes with prepared materials.

Meta — Reality Labs: Horizon Worlds (Oct 2020 - Jan 2023)

In Meta Reality Labs I started working on automated testing at scale then transferred to work on Horizon Worlds Interaction Design and Visual Debugging Tools.

- Co-Designed, Implemented, Maintained the near-field grabbing and distance-grabbing systems.
- Designed, Implemented, Maintained a visual debugging system that could draw dynamic points, lines, polys, shapes, text, colliders, vectors; all with color options and interactive realtime toggles and settings.
- Fully implemented a dynamic player scale feature, allowing players to change scale at will - while keeping all interface and other inputs usable
- Owned the Automation Lab for hundreds of Quest 2, Quest Pro, Rayban Stories devices in various revisions
- Developed interactive diagnostic, inspection, device revival, and remote host management tools

Apple — Technology Development Group (Dec 2018 - Oct 2020)

In Apple's TDG, I owned of the accuracy for the Measure App. Measure is an Augmented Reality (AR) app installed on billions of iPhones worldwide and served as a testbed for the Vision Pro.

- Designed, developed, maintained an automated system that verifies Measure's accuracy on all supported iOS devices. Results from this system were mission-critical to validating the iPad's LiDAR sensor prior to release.
- Created a standardized approach to AR accuracy verification, adopted by my entire organization. My approach enabled ARKit, Reality Composer, AR Quick Look and Reality Kit teams to streamline their process and quantify accuracy.
- Contributed several user interface improvements and bug-fixes to the Measure App.
- Created internal prototypes that verified RealityKit framework APIs prior to public release.
- Presented talks and demonstrations of AR technology, impacting my entire organization's familiarity with AR, and further advocating for first-class AR design principles.

Cisco Systems — Software Engineer (August 2017 - December 2018)

In Cisco's Data Center Switching Business Unit, I implemented code to automate verification of new Data Center Switching Products. I supported the release of three products from design through distribution.

- Produced an Object-Oriented approach to automated verification, reducing onboarding time for new products
- Created internal Virtual Reality prototypes that visualize live network attack data

Skills

C#, Python, Software Architecture, Prototyping, XR Interaction Design, JavaScript, C++, Swift, C, bash, HTML, CSS, Unity Engine, git, Ableton, Blender, Audacity

Education

B.S. Computer Engineering — North Carolina State University (2013 - 2017)