

ANDREW COMMINOS

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EDUCATION

University of British Columbia (4th year)
Bachelor of Science, Major in Computer Science
86% cumulative GPA

(September 2013 - May 2018 expected)

WORK EXPERIENCE

Mozilla · Platform Engineering Intern

(May 2015 - August 2016)

- Fixed a variety of rendering correctness and performance issues across platforms in Firefox's large C++ codebase
- Worked on OpenGL acceleration for Firefox for Linux, significantly improving rendering performance and responsiveness
- Led the effort to ship Firefox's GTK+3 widget backend, substantially improving desktop integration
- Added support for rendering to high-resolution displays on Firefox for Linux, drawing content correctly regardless of the display resolution
- Implemented the EXT_disjoint_timer_query WebGL extension, allowing developers new opportunities to optimize their WebGL games

Fullboar Creative Corp · Mobile Software Developer

(June 2011 - January 2015)

- Developed a significant portion of the iOS site safety app SiteDocs, utilizing MVC and object-oriented design principles
- Implemented an iOS frontend for the network testing software PathTest, allowing users to test network connectivity from their iPhone or iPad
- Prototyped an e-commerce client for iOS and Android using RESTful APIs for restaurant order fulfillment

PERSONAL PROJECTS

Plumble · github.com/acomminos/Plumble

(2012 - present)

- Leading implementation of the Mumble VOIP protocol for Android devices, providing robust group voice and text communications on phones and tablets
- Utilizes the Jumble protocol implementation I developed to allow third party integration with Mumble servers
- Over 175,000 downloads, 4.5 star rating on Google's Play Store
- Written in Java with native codec bindings in C++

Quarke · github.com/acomminos/quarke

(2016 - present)

- Deferred shading 3D renderer written in C++ targeting OpenGL 3.3
- Uses modern real-time rendering techniques such as omni-directional shadow mapping and SSAO

Mountie · github.com/acomminos/Mountie

(2014-2015)

- Android application to auto-mount external storage devices, written in Java
- Interfaces with the Linux kernel's block devices interface to identify and expose hotplugged block devices

Rasterust · github.com/acomminos/rasterust

(2015)

- A software triangle rasterizer written in Rust, outputting shaded and transformed geometry in ASCII
- Written in pure Rust using a custom linear algebra and transforms implementation

SKILLS

Languages: C · C++ · Java · Python · JavaScript · Objective-C · Haskell · Rust

Libraries: Android · OpenGL · GTK+ · Cairo · Cocoa Touch · Qt

Paradigms: Systems · Graphics · Algorithms · Networking