




Andrew Comminos

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Education

University of British Columbia

Bachelor of Science, Major in Computer Science (4th year)

September 2013 – May 2018
(expected)

- Cumulative GPA: A/4.00/86%, Major GPA: A+/4.33/90%
- Consistently ranked within top 15% of class in academic performance

Experience

Facebook

Software Engineer Intern

September 2017 – November 2017

- Built a lightweight client-side JavaScript profiler, providing detailed insight into users' browser performance on Facebook
- Designed and implemented an efficient encoding for sending large sampled stack traces over the web
- Developed a JavaScript syntax transform in OCaml for adding instrumentation across the Facebook codebase
- Created a scalable backend in Hack and Python for processing and aggregation of millions of samples

Amazon Web Services

Software Development Engineer Intern

May 2017 – July 2017

- Created a scalable Python backend for live aggregation and time series analysis of customer alerts for Amazon Macie
- Developed a dashboard in React.js to provide stakeholders a visualization of aggregated customer data and use patterns
- Built an intelligent alarm system integrated with AWS CloudWatch to report anomalous patterns in aggregate customer metrics, proactively identifying operational issues with the product

Mozilla

Platform Software Engineer Intern

May 2016 – August 2016

May 2015 – August 2015

- Added support for scaling web content on high-DPI displays to Firefox for Linux, vastly improving rendering quality
- Implemented a WebGL extension for developers to measure and optimize the rendering performance of their games
- Identified, analyzed, and fixed complex OS-level issues encountered with OpenGL acceleration on Firefox for Linux
- Increased the performance of several HTML5 games by over 200% by implementing zero-copy blends via Direct2D
- Improved the stability, correctness, and testing of Firefox's GTK+3 toolkit backend to a production quality state

Fullboar Creative Corp

Mobile Software Developer Intern

June 2011 – January 2015

(seasonal and part-time)

- Created native e-commerce clients on iOS and Android, querying RESTful APIs for restaurant order fulfillment
- Developed a significant portion of the iOS site safety app SiteDocs, utilizing MVC and object-oriented design principles
- Implemented a frontend for querying nodes and displaying results in the iOS client for PathTest, a network testing app

Personal Projects

Plumble

github.com/acomminos/Plumble

- Decentralized voice and chat communications client for Android devices, written in Java and C
- Over 200,000 downloads and a 4.5 star rating on Google Play, with an active open-source community

Quarke

github.com/acomminos/quarke

- Multipass 3D engine written in C++, targeting OpenGL 3.3
- Developed using modern real-time rendering techniques such as omni-directional shadow mapping and SSAO

Skills

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

Platforms/Libraries Linux · Android · OpenGL · AWS · GTK+ · Cairo · Cocoa Touch