Andrew Comminos

Experience

Facebook June 2018 – Present

Software Engineer

- Currently working on browser engineering and web standards on Facebook's Web Speed team

Facebook

September 2017 – November 2017

Software Engineer Intern

- 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 May 2017 – July 2017

Software Development Engineer Intern

- 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

MozillaMay 2016 – August 2016Platform Software Engineer InternMay 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

Education

University of British Columbia

September 2013 - May 2018

Bachelor of Science, Major in Computer Science (with Distinction)

- Cumulative GPA: A/4.00/86%, Major GPA: A+/4.33/91%

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