Tristan Amini

(416) 801-5288 | tristanamini@gmail.com

Technical Summary

C++
- Kernel Mode work.
- General User Mode work.
- Experience in game development.

Java
- Experience with backend services.

JavaScript
- React + State
- Redux + Sagas
- FlowType

SQL
- MySQL
- SQLite

Additional Technologies
Python, HTML, CSS, Git, LaTeX, Chef, Go, MATLAB, Unreal Engine 4

Open Source Work

Jenkins CI
- Fixed Python-specific bug in Cobertura plugin.

FlowTyped
- Added new type definitions to support my JavaScript work.

Connect

Github: github.com/Tamini
LinkedIn: linkedin.com/in/tamini

Education

University of Waterloo
Candidate for BASc
Systems Design Engineering
Class of 2018

Work Experience

Uber | Software Engineering Intern - Maps
May 2017 - August 2017 | San Francisco, CA
- Constructed vector tiles in Java to pass to the web frontend in order to display desired information and layers on maps.
- Set up S3 bucket, JavaScript frontend and Java backend to allow for uploading, downloading and displaying of images and other files on web pages.
- Set up a variety of dynamic data visualizations by surfacing ElasticSearch data to the JavaScript/React/Redux frontend using react-vis.

Electronic Arts | Associate Developer - Gameplay
September 2016 - December 2016 | Burnaby, BC
- Suggested and implemented SQLite to store different AI sequences for use in-game and to speed up development time.
- Rewrote much of the legacy C++ code for new read and write operations.
- Created a set of placers and processors in C# to organize, expediate and improve the animation selection process.

AMD | Driver Developer Intern
January 2016 - April 2016 | Markham, ON
- Wrote an automatic vulnerability fuzz testing program in C++ that interacts with both user and kernel mode to simulate attacks on the AMD driver.
- Fixed any identified exploits/vulnerabilities, giving AMD's users a more secure and reliable product.

IBM | Open Source Compiler Developer Intern
May 2015 - August 2015 | Markham, ON
- Worked in the two-man team that ported the OCaml compiler to the Z Architecture through writing and generating of x64, PPC and Z Assembly.
- IBM's customers are now able to run OCaml code on Z machines!

Interset | Software Engineer Intern
September 2014 – December 2014 | Ottawa, ON
- Created Scala application to read and anonymize millions of data entries.
- Maintained and set up a Hadoop/HBase/Phoenix/Spark install on AWS.
- Built company web pages using JavaScript, HTML and CSS.

Polar | DevOps Intern
January 2014 - April 2014 | Toronto, ON
- Worked with Django and Python for Polar's website and product backend.
- Created MySQL dump scripts in Python and SQL that run daily using cron.

Personal Projects

Spark | Third-Person Hack and Slash Game
Unreal Engine 4 | Still in development!
Creating a third-person PC game in Unreal Engine 4 using both Blueprints and C++. Using Blender for modelling and Maya for animation.

AntiChess | Chess Game with Custom AI
Java | github.com/Tamini/AntiChess
Created a chess game in Java with a from scratch custom AI. The AI determined the best move by looking at possible future board states, pruning very undesirable states early to save processing time.