Tristan Amini

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Education

University of Waterloo
Bachelor of Applied Science
Systems Design Engineering
Class of 2018

Connect

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

Technical Skills

C++
- Worked in C++ for driver dev at AMD.
- Created KMD fuzz tester at AMD.
- Used in game AI development at EA.

Java
- Created AntiChess and others games.
- Utilized in Selenium tests at Polar.
- Used in website backend at Interset.

JavaScript
- Worked heavily in JavaScript at Uber.
- Created many data visualizations.
- Thorough understanding of React.

SQL
- Wrote scripts to dump SQL at Polar.
- Setup/maintain SQL stack at Interset.
- Shifted NHL AI backend to SQL at EA.

Python
- Wrote bot for Polar's internal IRC.
- Worked with Django at Polar.
- Write scripts to speed up school work.

MATLAB
- Learned in university courses.
- Utilized for signal processing.
- Simulated projects for ideal results.

Additional Skills

Git, LaTeX, Scala, Go, Blender, Maya, Unreal Engine 4, x86 Assembly

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 on maps using MapBox.
- Set up S3 bucket, JavaScript frontend and Java backend to allow for uploading and displaying of images on the web pages.
- Set up a variety of dynamic data visualizations by surfacing ElasticSearch data to the JavaScript/React/Redux frontend.

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
January 2016 - April 2016 | Markham, ON
- Led the team that developed software in C++ to simulate attacks on potential vulnerabilities in the AMD display driver. Leading to a more secure and reliable driver for AMD's users.
- Fixed bugs and worked on features in the AMD Kernel Mode Driver.

IBM | Open Source Compiler Developer
May 2015 - August 2015 | Markham, ON
- Part of the two-man team that ported the OCaml compiler to the Z Architecture. Required writing x64, PPC and Z Assembly.

Interset | Software Engineer
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
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
July 2016 - Present | 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
2012 - 2013 | 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.