Tristan Amini

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EDUCATION

University of Waterloo
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.

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

C#
- Writing scripts for my Spark game.
- Wrote animation processors for EA.
- Created animation placers for 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

ELECTRONIC ARTS | ASSOCIATE DEVELOPER - NHL 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.
- AI database changes required rewriting 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 the AMD display driver. Fixed all identified security vulnerabilities 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.
- Worked on the Go Assembler and Linker for Z.

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 for Polar's website and product backend.
- Created MySQL dump scripts in Python and SQL that run daily using cron.
- Wrote an IRC bot in Python to add useful features to the IRC chat.

OPEN SOURCE WORK

JENKINS | CONTRIBUTING COMMUNITY MEMBER
March 2014 - Present | jenkins.io
Fixed a bug in the Cobertura plugin that caused test result metrics to be incorrectly displayed to users.

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 custom AI. AI implemented alpha-beta pruning and depth-first search to find the best moves. Each piece was assigned a point value and the AI determined the best move by looking at possible future board states and determining the most favourable outcome.