James Larsen

Github.com/Phobos2390 ● linkedin.com/in/Phobos2390 ● (801) 864-4485 ● JamesB444@msn.com

Education

BRIGHAM YOUNG UNIVERSITY – Provo, UT, Expected Graduation December 2016
Computer Science, Undergraduate ● Overall GPA: 3.11/4.0

Hackathons Attended

HackCU – 1-3 April 2016 – Smart Beats (Winner of the Grand Prize and Two API prizes)
CourtHack – 4-5 March 2016 – Robot Lawyer (Winner of the Grand Prize and will present at E-Courts December)
PennApps – 9-11 September 2016

Programming Projects

- **Smart Beats** – Set of headphones with sensors that detect whether they are on your head and will pause a player if taken off and will resume the player if placed back on. Winner of HackCU 2016 Hackathon.

- **Robot Lawyer** – Friendly Chat service that fills out legal documents by querying the user in plain English. Full Stack. Utilized a data structure to control conversation flow. Winner of Courthack 2016 Hackathon.

- **Tritanium Battles** – OpenTK 3d Space Shooter with AI Opponents. Made use of Quaternions for effective steering of the ship. Used Newtonian physics for ship movement.

- **Kraze (Multiple Versions) Ancestor Kraze is accessible by visiting**
  http://virtual-pedigree.fhtl.byu.edu/familyhistorykraze/
    - Base version created on the TI-83. Utilized matrix for data checking and saving. Used calculator picture saving functions to reduce latency.

- **Chess** – C# Windows forms version of chess. Utilized Model View Presenter pattern.

- **Adventure Server** – C# proof of concept that was a follow up to RPGCPP. Segmented the entire Graph into separate regions. Utilized xml deserialization and SQL Server.

- **UFO:AI Stat Calculator –** Windows Form application that sorts character stats.

- **RPGCPP** – C++ text based adventure game. Utilized data persistence to allow games to be split into separate sessions. Created a map editor to assist in the creation of the game data.

Work Experience

Tybera Development Group Intern   May 2016 – Current   Orem, UT
- Translated java projects from the Eclipse build system to the Maven build system
- Created a Maven repository on a Linux server accessible to the company network
- Built a WebDAV server from the ground up using the Java Servlet API
- Worked with FOP document generation

Family History Technology Lab Programmer   January 2015 – Current   Provo, UT
- Pioneered the creation of the game Ancestor Kraze
- Fixed the broken spacer algorithm in other person's project by working out the underlying math

Computer Science TA/Grader   September 2013 – May 2014   Provo, UT
- Implemented a merge sort algorithm for sorting graded papers alphabetically
- Generated my own answer keys that I checked with the professor to speed up grading process