Tristin K. Glunt

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EDUCATION

Albuquerque, NM	**University of New Mexico**	**Fall 2014 – Spring 2019**

- B.S. in Computer Science with minor in Mathematics, expected May 2019. Major GPA: 3.91
- Graduate coursework: Advanced Neural Networks, Machine Learning, Independent Study (S19)
- Undergraduate coursework: Data Structures and Algorithms I & II, Operating Systems, Linear Algebra, Applied Statistics and Probability, Ordinary Differential Equations, Numerical Methods (S19), Software Engineering (S19)

EXPERIENCE

Research and Development Intern	**Sandia National Laboratories**	**May 2017 - Present**

- Researched and developed a real-time intrusion detection system using acoustic sensors and Arduino that is two orders of magnitude cheaper than the current deployed system; the research is published to Sandia's library
- Programmed large data collection system to monitor accuracy and determine normal environmental conditions of the above sensor in C; setup machine learning algorithms such as KNN to predict intrusions by detecting anomalies
- Debugged deployed C# system using multithreaded server-client headset communication; the patch allowed clients to dynamically connect to servers saving personnel from having to setup a configuration file
- Granted security DoE L clearance to further assist organization on sensitive material
- Presented to development team and project leads to use Git version control over SVN; long term team of SVN immediately made the switch; the switch to Git immediately increased product documentation

PROJECTS

- **Music Genre Classification:** Built CNN classification model using TensorFlow and Keras to classify the genre of 30s music clips converted into spectrograms; ranked first out of the graduate level class with 89% accuracy
- **Flappy Bird w/ Genetic Algorithms:** Built flappy bird game engine and trained a bird agent to successfully "beat" the game by using adaptive genetic algorithm learning methods and ANN, built with Python
- **Genome and News-Article Classification:** Built Random Forests to classify Intron-Extron boundaries; Built Naïve Bayes and Logistic Regression for news-article classification, both projects built with Python
- **Multithreaded Train Simulator:** 2D GUI of a train simulator where each entity is its own thread: tracks, lights, stations, trains, and switches, built with Java
- **Integrate-Fire Model:** Modeled the neurons in the brain with synaptic input using diff. equations in Python

PROGRAMMING LANGUAGES

- Most experienced with Java, C, and Python
- Some experience with C++, C#, MATLAB, Lisp, Haskell, and reading Assembly

ACHIEVEMENTS

Professional-Gamer	**May 2015-May 2017**

- Team captain of nationally recruited competitive SMITE team of five players; the national league consisted of 50 individual players while SMITE has tens of millions of unique players
- Competed and led team to win SMITE World Championship in Atlanta Ga, January 2017, against the world's best teams for a prize pool of $150,000; team origins were from the United States, Australia, and the United Kingdom
- Developed excellent leadership and communication skills to discuss issues and strategies to improve as well as the ability to learn from useful criticism to improve as a teammate, player, and captain
- Sponsored by gaming industries to market and represent their brand while being spectated by over 50,000 people
- Traveled across the country to compete at multiple national level competitions; won two of the competitions while coming in second in three others and only finishing out of the top three a single time