**Preston Robertson**

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**Objective Statement**

Working at Riot has been my goal for the last 3 years, I wish to help add statistical insight to the balancing of League of Legends, with the long term goal of adding player opinions in the most optimal way.

**Skills**

* Python 3 in Jupyter and Spyder, and R in Rstudio
* Experience with clustered data processing through PySpark
* Proficient in Tensorflow and PyTorch
* Understanding of math and theory behind the Machine Learning Techniques

**Education**

Industrial and Systems Engineering **|** Mississippi State University **|** Starkville, MS

* Master’s in Operations Research, expected May 2023
* Bachelor’s in Industrial and Systems Engineering, May 2021
  + Minored in Math and Global Engineering

**Work Experience**

Graduate Research Assistant, Graduate Teaching Assistant **|** Dr. Linkan Bian

Starkville, United States **|** August 2021 – Current

* Developed Python skill further and learned the basics of R coding.
* Studied the theory behind and applied machine learning techniques (and feature engineering principles) such as support vector machines, neural networks, random forest, elastic net regression, etc.
* On neural networks, designed GANN’s, RNN’s, CNN’s, etc.
* Currently designing a new activation function for neural networking models and submitting to a competition. (is outperforming activation functions such as relu)
* Developing an update to the forget gate in the LSTM model to allow for better pattern detection in time-series based datasets.

Undergraduate Research Assistant in Athlete Engineering **|** Dr. Reuben Burch

Starkville, United States **|** August 2017 – May 2021

* Performed data analysis on our research and interned for the MSU Basketball teams.
  + MSU Basketball had 1 minor injury in my 3 years of interning.
* Joined and lead the “Report Making Team” which improved contact between most coaching staff and formed long term data collection strategies.
* Worked with principal investigators to coordinate qualitative research into Athlete Engineering using motion capture software to observe athlete’s movement.
* Achieved an author position for peer-reviewed papers as an undergraduate.