WILLIAM MULVANEY

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Objective

Pursuing a Spring and/or Summer internship in Computer Science. Available to begin January 2021.

Education

UW-Madison, Computer Science and Physics, BS - May 2021

- GPA: 3.90
- Dean's List
- Relevant Courses: Artificial Intelligence, Linear Optimization, Database Management Systems, Algorithms, Quantum Mechanics, Electromagnetic Fields

Experience

Department of Mathematics, UW-Madison

Student Assistant / 08.2019 - Current

Responsible for facilitating discussion sections for a UW math course and leading students in their learning process. This position requires a deep understanding of basic math and teaching principles.

Projects

Biological Systems Optimization

Linear Program that simulates the molecular processes in a cell. This model had an objective function that maximizes the growth of the cell while minimizing the amount of molecules needed to produce these reactions.

MNIST Neural Network

This program uses the Keras library to create a neural network that can determine handwritten letters from the famous MNIST dataset. Uses their training and testing data with accuracy above 99%.

Skills

General: Database Queries, Keras, Linear Programming/Optimization, Algorithm Techniques

Languages: Python, Java, SQL, Julia, C++, C