Blake Martin

(270) 570-1840
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SUMMARY

Computer science student with a passion for data science and a strong background in mathematics. Interested in the application of machine-learning models to real-world problems. Hobbies include Rubik's cube speed solving.

EDUCATION

Brescia University, Owensboro

08/2020 - present

Working towards a BS in Computer Science with a minor in Psychology (expected graduation: 05/2024), GPA: 3.73

WORK EXPERIENCE

Home Depot, Owensboro - *Order Fulfillment Associate*

03/2021 - present

- Collaborated with associates and worked individually to prepare online orders by customers for pickup or delivery
- Communicated with customers to schedule dates for pickup and ensure customer satisfaction
- Selected for Associate of the Month

PROJECTS

"Effect of Fitness Function on Model Performance Using Neuroevolution in Flappy Bird"

2021 - https://github.com/bamartin1618/FlappyBirdNeuroevolutionDataAnalysis

- Studied the effect of genetic algorithm configurations on the performance of a neural network designed to play the game *Flappy Bird*
- Accepted for presentation at the 2022 National Conference on Undergraduate Research
- Gained experience in running inferential statistical tests (hypothesis and post-hoc testing) and drawing conclusions using Jamovi

Self Driving Car

2021 - https://github.com/bamartin1618/SelfDrivingCar

- Implemented a deep Q-network to train an agent to drive a virtual car using PyTorch and Kivy

- Included a feature to record and chart the performance of the agent over time

CERTIFICATES

Machine Learning A-Z: Hands-On Python & R In Data Science

https://www.udemy.com/certificate/UC-62038aa7-0c8c-4816-ab78-6f91f9408840/

2021

- Familiarized with common Python libraries used in scientific calculations (Pandas, Scikit-Learn, PyTorch, NumPy)
- Practiced implementing popular supervised learning algorithms (regression, classification)
- Practiced implementing popular unsupervised learning algorithms (clustering, association rule mining)
- Learned metrics to assess the performance of machine-learning models (confusion matrices, cost functions)

MEMBERSHIPS AND AFFILIATIONS

Brescia University Psychology Club - *Member*

10/2020 - present

- Attended meetings and club-related activities

ORAL PRESENTATIONS

Martin, B.A., Besing, R.C. (2021). Effect of Fitness Function on Model Performance Using Neuroevolution in Flappy Bird. National Conference on Undergraduate Research (NCUR) (April 2022)

AWARDS

Brescia University Dean's List

2020, 2021

Brescia University Freshman Programming Award

04/2021

- Developed a Gaussian Naive Bayes classifier in C++ to classify heart-healthy foods based on nutritional data as a final project
    - Implemented kernel density estimation and bandwidth smoothing to boost accuracy
    - Scraped nutritional data from the USDA database using a Python script

REFERENCES

Dr. Rachel Besing, Associate Professor of Psychology, Brescia University, rachel.besing@brescia.edu, (270) 686-4315