LUNA NGUYEN

SKILLS

- Languages: Python | R | C/C++ | Java | Bash | Racket
- Frontend: JavaScript | HTML | CSS | Node.js | React.js
- Technologies: MySQL | Jupyter Notebooks | VSCode | Unit Testing | Linux | Git

EXPERIENCE

Machine Learning Researcher | Lumiere Education Python, R, MySQL ⊗

09/2022 - 08/2023

Remote

- Authored a paper investigating the correlation between tweet sentiment and stock prices during the COVID-19 pandemic, featured in the Journal of Emerging Investigators.
- Employed advanced queries in **MySQL** on a dataset of **over 3.2 million tweets**, analyzing the correlation across different COVID-19 periods and with various tweet features.
- Utilized **Python's scikit-learn** library to train various linear and nonlinear models, achieving a **78% accuracy rate in labeling positive and negative tweets**.
- Strengthened research credibility by performing three comprehensive **statistical analysis tests in R**, confirming the significance of the observed correlation.

PROJECTS

VEX Robotics Programming

- Employed **C++** to control the robot's movements and process sensor data, ensuring optimal performance.
- Developed a computer vision algorithm that **enhanced robotic perception and decision-making by 60%** during autonomous operations.

Brick Breaker Game

- Designed a **first-place winning game using Python** in my school game development competition.
- Elevated gameplay experience by optimizing game levels, integrating immersive sound effects, and overcoming complex challenges related to collision detection and power-up implementation.

EXTRACURRICULARS

President of Chess Club

09/2019 - 06/2023

• **Pioneered** and successfully expanded our school-wide chess tournament to **interschool competitions** in the Greater Vancouver area, fostering camaraderie and healthy competition within the chess community.

President of Math Club

09/2020 - 06/2023

• Organized tutoring sessions that **helped over 30 students achieve certificates** from Waterloo Math competitions each year.

President of Physics Club

09/2020 - 06/2023

• Led problem-solving sessions that guided my high school to a **top-three finish in the UBC Physics Olympics**.

Long Term Care (LTC) Initiative Team Leader $\mathscr D$

12/2020 - 06/2023

• Directed a 15-member team in **delivering over 1,300 cards and video performances** to seniors in care homes across the Greater Vancouver area, providing much-needed companionship and support during Covid-19.

AWARDS

VEX Robotics Create Award (Provincial)

• Won twice. Awarded to 2 of 110 teams in each tournament for their creative engineering solutions.

Top 25% in Fermat, CSMC, and Hypatia Waterloo Math Contests

• Fermat: out of 12355 students, CSMC: out of 9895 students, Hypatia: out of 4723 students.

1st Place American Math Competition (School)

EDUCATION