Kyle Zhang

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http://RiptideStar.com

Experience

Intern, WaterValley Capital Management, April - September 2021

WaterValley is a one of many hedge funds in HongKong. Managing billions of dollars over many future contracts and calculating trends within the stock market does require the power of computing and AI. That's why they put me in as their intern.

- Performing data analyses and implementing trading algorithms using Python and AI
- Writing new strategies in python to optimize for contracts within previous data
- Comparing performance of strategies on previous data to generalize what makes up the almost perfectly optimized trading algorithm

Technology Instructor, Tech4Kids & CFAP Youth Council, May 2020 to Present

Designed and taught three online technology classes for 180+ students with hands on projects (Code in GitHub: https://github.com/RiptideStar)

- [Python Programming with AI & Machine Learning Projects](#)
- [Game Programming Using Unity & C#](#)
- [Learn Python, Web Crawlers, Website Creation & Data Visualization with Hands-on Projects](#)

Summer Intern, Nan Cancer Research Lab at Oregon Health & Science University (OHSU), June - Sept. 2019

- Over 400 hours under the supervision of Dr. Nan in his Lab, a leading Cancer Imaging Lab nationwide, I implemented and automated multimodal microscopy with NanoJ-Fluidics using low-cost Lego hardware controlled by ImageJ-based software.
- Basically, I applied the knowledge I learned from FLL & FTC (robotics competitions) to leverage the Lego robotics hardware to automate the imaging process based on this [research paper published on Nature](#)

Lab Assistant, Chemistry Lab at Oregon State University, July - August 2020

Under the supervision of Dr David Ji, I implemented the data processing program using Python (GitHub below):

- [Python program processing chemistry research data](#)

Software Lead, FTC Robotics Team (Fellowship of the Robot), Sept. 2018 - Mar. 2020

- Leading Software Programming for the team
- Top 10 team in Oregon (out of 209 teams)

- Qualified for 2019 World Tournament Championship in Houston.

Software Lead, Destination Imagination Team, Sept. 2015 - May 2016

- Led the design and implementation of a robotic squirrel using Lego hardware
- Won the State Championship and represented Oregon in the World Tournament at the University of Tennessee. Ranked 19th worldwide.

Leadership and Services

- Founded the AI (Artificial Intelligence) Student Club at Lake Oswego High School, 2021.
    - As the president of the AI Club, I am helping fellow students to explore and learn AI technology.
    - I organized and hosted computer science panel discussion 8/15/2021
        - Invited two professors, Dr. Fern from Oregon State U and Dr. Zhao from Washington State U as panelists
        - Help answering questions from high schoolers who want to study CS in colleges.
        - Information and Recording http://t.ly/FRIY
        - My final remarks - video clip
- Designed and developed the video game website for the Valorant community to revolutionize how players search for lineups.
    - http://LineupsValorant.com/
- Designed and Developed a Covid19 Vaccine Finder website for helping people find and register for vaccine shots.
    - The website keeps crawling / checking / reporting covid19 vaccine sign-up sites for availability. If available spots are found, registered users are notified thru email immediately.
    - Technology stack: Python + Flask + Shell Scripts + SQLite + html
    - User Site: http://vaccine19.us/
    - Github: https://github.com/RiptideStar/covid19signupStatus
- Volunteer for non-for-profit organizations - creating / maintaining websites for them:
    - http://hcyfoundation.org/
    - https://www.nwchinesealliance.org/
    - http://xstreamlc.com/
- Volunteer for counseling kids with video gaming emanations
    - Organized and held panel discussions on Psychology of Gaming & How to Manage/Balance with School Life for parents and children
- Organizing Summer, Winter and Spring break camps and classes
    - Hosting and coaching tennis camps every Summer
    - Organizing and teaching technology online classes (Python, Web and Gaming Programming, AI & Machine Learning etc). 180+ students enrolled in the classes since summer 2020.

Other PDX Community Services

- Teaching community kids computer science, game development (c#, c++), and python and web programming
- Created tennis groups and camps for kids. Coached tens of kids tennis (since I was 12) to inspire them to be active with sports
- Volunteer in the annual Portland Rose Parade every year since I was 9

Skills

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Python, Java, C++, C#, JavaScript, Linux Shell, SQL
AI, Machine Learning, Neural Network, TensorFlow, Keras
VS Code, MS Visual Studio, MATLAB, PyCharm, OpenCV, Git/GitHub, Unity,
Unreal
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Education

Lake Oswego High School, Lake Oswego, OR

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Planned Graduation 2022
GPA: 4.5
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Computer Science, Portland Community College, OR, 2019 - present

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CS140, CS160, CS161, CS162, CS179, CS233, CIS284, CS260, CIS275, EC201,
EC202, MTH261
GPA: 4.0
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Robotics and Quantum Computing by Prof Perkowski at Portland State University, OR 2020

Machine Learning, Online Class by Andrew Ng, Stanford University, 2020

Multivariable Calculus, John Hopkins University - CTY, 2021

My Websites

- http://LineupsValorant.com/ A website for the valorant community to revolutionize how players search for lineups.
- http://vaccine19.us/ A covid19 vaccine finder and signup site.
- https://github.com/RiptideStar/ My GitHub home since 2018.
- https://riptidestar.com