Jerry Liu

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**Work Experience**

* **Software Engineering Intern Bethesda, MD**

*Leidos May 2021 – Aug. 2021*

Worked on the All-World Environment Simulation (AWESIM) project, an algorithm that creates a high-fidelity physics-based simulation of the generation and propagation of acoustic signals in the ocean for sonar trainers in the U.S. Navy. Wrote and debugged code in C++, Python, and React.js. Followed the agile methodology with a Jira Kanban Board and used the Conan C++ package manager, RESTful web services, Jenkins, and Kubernetes.

* **Teaching Assistant for CS 3330 Charlottesville, VA**

*University of Virginia Feb. 2021 – Present*

Assisted students with understanding computer architecture concepts and the x86 assembly language. Hosted weekly office hours, cohosted lab sections, and answered questions on Piazza.

**Skills**

* **Programming Languages:** Python, Java, C++, C, JavaScript, HTML, CSS, SQL, C#, Bash, MATLAB
* **Libraries:** React.js, NumPy, Matplotlib, Scikit Learn, TensorFlow, Keras, PyTorch, OpenCV, Pandas
* **Tools:** Visual Studio Code, Eclipse, Vim, JUnit Testing, GitHub, VirtualBox, Conan C++ Package Manager, Docker, Kubernetes, Jenkins, Jira, Django, Heroku, Jupyter Notebook, Wireshark
* **Operating Systems:** Linux, Windows

**Education**

* **University of Virginia** **Charlottesville, VA**

*B.S. Computer Science, GPA: 3.99/4.00 Aug. 2019 – May 2023*

* **Thomas Jefferson High School for Science and Technology Alexandria, VA**

*Advanced Studies Diploma, GPA: 4.53 Sep. 2015 – Jun. 2019*

* **Relevant Coursework:** Operating Systems, Databases, Mobile Applications, Advanced Software Development, Computer Networks, Artificial Intelligence, Computer Vision, Computer Architecture, Machine Learning, Algorithms, Data Structures, Discrete Math, Linear Algebra, Probability, Statistics

**Research**

* **Investigating Data Poisoning and PGDAttack during Adversarial Training Charlottesville, VA**

*University of Virginia Jun. 2020 – Sep. 2020*

Analyzed different combinations of data poisoning and PGDAttack in adversarial training of a linear SVM to investigate if the two adversarial methods amplify or hinder each other.

* **Chess Game Tracking via Computer Vision & Deep Learning Alexandria, VA**

*Thomas Jefferson High School for Science and Technology Aug. 2018 – May 2019*

Developed project on chess game tracking through computer vision and deep learning using a custom dataset and a Convolutional Neural Network. Used the Keras, TensorFlow, and OpenCV Python libraries.