# **EVAN WANG**

evanzwang@gmail.com o 240-704-5699

#### **EDUCATION**

## University of Maryland, College Park

Aug. 2021 - present

President's Scholarship recipient (merit-based)

MBHS Science, Mathematics, and Computer Science Magnet Program Aug.~2017 - June~2021

3.96 Unweighted GPA o 4.76 Weighted GPA

#### Relevant Coursework:

- Computer Science: Algorithms and Data Structures A/B, Analysis of Algorithms, Computational Methods
- Math: MV Calc, Diff. Eq., Statistics, Linear Algebra, Discrete Math

#### RESEARCH EXPERIENCE AND PROJECTS

### Deep Reinforcement Learning on Connect Games

July 2021 - present

Developed an environment to train reinforcement learning models to play "connect" games like Five-in-a-Row and Connect-4. Initially based on a previous project (Deep-Q Learning for Connect-4) from Jan. 2020. The main approach was adapted from that of AlphaZero. The training environment was implemented in Python (NN using PyTorch). The interactive web UI was written in JavaScript.

Self-Supervised Monocular Depth Estimation with Mr. Quinn Shen May 2020 - Oct. 2020 Built a deep convolutional neural network architecture and training pipeline to take in a single image and predict a per-pixel depth map of that image. Expanded on previous research by studying the effects of different network architectures and color spaces.

GU Medical Center: Internship with Dr. Albert J. Fornace Jr June 2019 - Aug. 2019 Performed data analysis on lipidomic and transcriptomic data with Python, using raw data preprocessing techniques and machine learning classification algorithms like nearest shrunken centroids. Obtained hands-on experience with fundamental biological laboratory procedures, like cell culture techniques.

#### **SKILLS**

Fluent Languages Python, Java, JavaScript, MATLAB, C#, C++, R, (spoken) Mandarin

Frameworks OpenCV, NumPy, pandas, scikit-learn, Django, PyTorch

Tools and Software LATEX, Unity, Windows, Linux

## AWARDS AND EXTRACURRICULAR ACTIVITIES

USACO Platinum division participant

2019 - present

Science Montgomery 2<sup>nd</sup> place (computer science category with monocular depth project) 2021

Montgomery Blair Computer Team captain

2020 - 2021

Montgomery Blair Informatics Tournament organizer

2020 - 2021

#### VOLUNTEER EXPERIENCE

Counseled for the CCACC Volleyball Clinic, helping players learn and improve at volleyball, in addition to organizing and leading their respective teams. 2019 - 2020

Helped and served senior citizens and hospital patients by performing piano music as a volunteer for the Tacy Foundation.

2015 - 2020