EVAN WANG

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EDUCATION

University of Maryland, College Park *Aug. 2021 - present*

President's Scholarship recipient (merit-based) w/ 4.0 GPA

Relevant Coursework:

- *Computer Science:* Object-Oriented Programming 1 & 2, Intro to Computer Systems, Discrete Structures
- *Math:* MV Calculus, Linear Algebra, Applied Statistics, Combinatorics and Graph Theory

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

3.96 Unweighted GPA ∘ 4.76 Weighted GPA

Relevant Coursework:

- *Computer Science:* Algorithms and Data Structures A/B, Analysis of Algorithms, Computational Methods
- *Math:* MV Calculus, 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++, R, C, (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 2nd place (computer science category with monocular depth project) *2021*

Montgomery Blair Computer Team captain *2020 - 2021*

Montgomery Blair Informatics Tournament organizer *2020 - 2021*