MATTHEW BANDOS

mat.bandos@gmail.com; Monroeville, PA
Website: *(https://matthewbandos.netlify.app/)* GitHub: *(https://github.com/RoboticsMB)*

Highly motivated and accomplished student with a strong academic background in computer science and a passion for robotics. Thrives in collaborative team settings and excels in challenging projects. Seeking opportunities to further develop expertise in robotics and programming, while actively contributing to a dynamic organization in a real-world environment.

Education

GPA: 4.0+ PSAT: 1510 SAT: 1560

AP Courses: *Computer Science(5), Calculus AB(5), Physics 1(4), Calculus BC(5), Physics C(5), Chemistry(5), English 11(5)*

Experience

Robotics Club: Team Captain, Lead Programmer, and TA 5/6/2021 – Present

Programming, debugging, interacting and troubleshooting electronic components and custom circuits.
Communication with Mechanical Team. Strategize gameplay at FIRST Robotics Competition.
Software Teaching Assistant (Taught C++ to younger programmers, distributed workload).
Presented at Google about robotics (Bakery Square Offices, Pittsburgh, Pennsylvania)

Chess Camps: Teaching Assistant 6/19/2023 – Present

Set up Chess activities. Reiterated concepts. Answered questions. Assisted with puzzles and gameplay.
Facilitated movement of campers. Supervised children.

Stem Coding Lab: Volunteer Teaching Assistant 6/7/2023 – Present

Set up CS activities. Assisted with teaching material. Helped in project prototyping and design
Facilitated movement of campers. Supervised children during breaks.

Camp Invention: Intern 6/24 – 7/1/2021

Set up STEM activities and events. Assisted in teaching material. Helped design prototypes.
Facilitated movement of campers. Supervised children during breaks.

Extra Courses

MIT EdX: *Intro to Computer Science and Programming Using Python* 6/3 – 8/6/2020

Core Elements, Functions, Tuples, Lists, Dictionaries, Debugging, Assertions and Exceptions,
Classes and Inheritance, Computational Complexity, Searching/Sorting Algorithms, Data Visualization

MIT EdX: *Introduction to Computational Thinking and Data* Science 10/14 – 12/18/2020

Optimization/Knapsack Problems, Decision Tree, Dynamic Programming, Graph, Stochastic Thinking,
Random Walks, Inferential Statistics, Monte Carlo Simulations, Data Usage, ML, Statistical Fallacies

HarvardX: *Data Science: R Basics* 6/28 – 7/20/2021

Functions, Data Types, Vectors, Sorting, Indexing, Data Wrangling, Plots, Conditionals, Loops

University of Pittsburgh: *Object Detection and Localization in Medical Images* 7/10 – 7/14/2023

Introduction to: Computer Vision, Deep Learning, Deep Convolutional Neutal Networks, Object Detection, Localization, PyTorch, Manual Annotation, Sliding Windows, Non – Max Suppression, Single Shot Detector

Projects

Personal Website: *Information About Me (https://matthewbandos.netlify.app/)(HTML, CSS, Java Script)*

Physics Homework Solver: *Systematic brute force algorithm to solve homework problems. (Python)*

Google Forms to Canvas: *Scans and copies google form and converts to its Canvas equivalent (Python)*

Robotics Software: *Used to operate Robot in 2023 FIRST Regional and Championship (C++)*

Major Achievements

FIRST GPR Robotics – *1st place Alliance*

Math Kangaroo – *1st in PA, 1st in Nation*

AAA WPIAL Tennis – *1st place team*

Extra Curriculars

Snowsports Club, Tennis Team, Robotics Club, Chess Club, Piano, Community Service (100+hrs)