MATTHEW BANDOS

mat.bandos@gmail.com; Monroeville, PA

Website: (https://matthewbandos.netlify.app/) GitHub: (https://github.com/RoboticsMB)

Highly motivated, accomplished, multilingual student with a background in computer science and a passion for robotics. Thrive in collaborative team settings and excel 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: 4.4+ (Salutatorian) SAT: 1560 (99th Percentile) PSAT: 1510 (99th Percentile)

HS Courses: 7 Mathematics (4 Honors, 3 AP), 2 Physics (AP), 2 Chemistry (Honors + AP), 1 Computer Science (AP), 1 Biology (Honors), 2 Economics (AP), Psychology (AP), 2 English (AP), 2 History (AP), 5 Spanish (Honors + AP), ...

Experience

Simcoach Games: Summer Apprenticeship Starting 6/10/2024

Designing Video Games for learning and classroom applications. Software Team

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

Programming, Software TA (Taught C++ and Java), Troubleshooting electronic components. Coordinating Robot Design, Strategizing at Competitions, Presented at Google on Robotics.

Chess Camps: Teaching Assistant 6/19/2023 – 8/4/2023

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 – 7/28/2023

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 6/24/2021 - 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 Neural 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)

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++)

(And just for fun) Physics Homework Solver: Systematic brute force algorithm to solve homework problems online. (Python)

Selected Achievements

National Merit Scholarship Finalist (2024)

AP Scholar with Distinction (2023)

FIRST GPR Robotics 1st Place Alliance (2023)

CalcuSolve 1st Place (2023), 1st Place (2022)

AAA WPIAL Tennis 1st Place (2023), 2nd Place (2024)

WPIL Chess Championship 1st Place (2022)

Extra Curriculars