

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+	SAT: 1560 (99 th Percentile)	PSAT: 1510 (99 th Percentile)
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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
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*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 – 8/4/2023
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*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 – 7/28/23
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*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
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*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: <i>Intro to Computer Science and Programming Using Python</i>	6/3 – 8/6/2020
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*Core Elements, Functions, Tuples, Lists, Dictionaries, Debugging, Assertions and Exceptions,
Classes and Inheritance, Computational Complexity, Searching/Sorting Algorithms, Data Visualization*

MIT EdX: <i>Introduction to Computational Thinking and Data Science</i>	10/14 – 12/18/2020
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*Optimization/Knapsack Problems, Decision Tree, Dynamic Programming, Graph, Stochastic Thinking,
Random Walks, Inferential Statistics, Monte Carlo Simulations, Data Usage, ML, Statistical Fallacies*

HarvardX: <i>Data Science: R Basics</i>	6/28 – 7/20/2021
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Functions, Data Types, Vectors, Sorting, Indexing, Data Wrangling, Plots, Conditionals, Loops

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

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)