

Michael Kittredge (go to career center) (look up companies)

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Education

University of Maryland, College Park

Pursuing a B.S. Computer Science

College Park, MD

May 2027

- Relevant Coursework: Object Oriented Programming I & II, Discrete Structures

Brunswick High School

Brunswick, MD

August 2020 - May 2024

- 4.78 weighted GPA, 4.0 unweighted GPA
- Awards/Activities: Class Rank 4, Motivate Award at FTC Competition

Leadership & Work Experience (reduce words, save space for more projects)

Frederick Flight Center

Front Desk Staff

Frederick, MD

June 2023 - Present

- Created a new version of the company's website using Squarespace, making it much more navigable with the goal of decreasing the number of confused calls and increasing customer satisfaction in the confusing process
- Guided students in how to obtain flight training, as well as payment plans, specifically how to use VA Benefits to pay for flight training and licenses. Advised students on how to begin training and the timeline to get to the airlines.
- Updated the auto attendant for the phone system using software from Glessner Technologies

Minerva's Mechanics Robotics

Programming Captain and Team Co-Captain

Brunswick, MD

August 2020 - May 2024

- Led the team to be first place in the APL Qualifier for First Chesapeake, and winning the Motivate Award
- Innovated on the pathfinding code, handwriting a fully functioning pathfinding algorithm utilizing A* as well as a variant of a DFS approach due to the smaller scale of the field.
- Trained the new programmers in Java concepts such as classes, inheritance, methods, several data structures, and simple algorithms. Will continue as a mentor to the team in college.

Independent Projects (Put it on github, include link at top, active voice)

GMTK Game Jam Submission

<https://bosskit.itch.io/hard-wired>

- Under the theme of "Built to Scale" created a 2D crafting video game in just 72 hours using Unity's 2D game engine and made all of the 2D sprites as well as the code in C#

Random Terrain Generation

- Created a model of a natural landscape using a grid of points with heights determined by a Perlin noise function, and created the polygons sequentially using Unity's 3D Engine and C#

Vision Impaired Navigation Device Simulation

- As part of independent research, found a potential use of music in mapping directions to points in a house using C# and an A* pathfinding algorithm. Part of an overall self-study of the potential benefits of music for directions.
- Played musical notes to the simulated person with varied levels of responding based on the volume and pitch of the notes, and generated those using directions from a live-updated A* path to a preselected goal.

Fractal Drawings

- Using an Iterated Function System with Java, created a recursive algorithm to draw any self-filling fractal with just the parameters for the angle for each turn, how many iterations to do, and the turning pattern, drawn with python.

Additional Info

- **Languages:** Java(Primary), C#, JavaScript, R (In Progress), C (In Progress)
- **Software:** Unity, Blender, Bambu Studio, Visual Studio, Eclipse Java
- **Activities:** Game Development, 3D Modeling and 3D Printing, 2D Sprite Development, Robotics