Adam Beckingham

EDUCATION

Thomas Moore Academy – Graduated 2019

- Math 30-1 and math 31
- Python programming essentials
- Two spreadsheet data collection/visualization courses for Microsoft Excel

Metro Continuing Education – Completed 01/2020

- Physics 30-1. (Upgrading, completed)
- Math 30-1. (Upgrading, completed)

Certifications

- Responsive Web Design (completed 2022-03-18)
- Javascript Algorithms and Data Structures (completed 2023-04-16)
- Workplace Infection Training (completed 2021-09-13)
- WHMIS with GHS (completed 2021-09-13)
- Food Handler Certificate (2021/09/12 expiring 2026/09/11)

EXPERIENCE

Programming Languages

- Python (5 years)
- C (4 years)
- z80/ez80 assembly (4 years)
- fasmg macro assembler (4 years)
- JSON (2 years)
- C++ (1 year)
- C#
- Java
- JavaScript
- HTML
- CSS
- HLSL
- GLSL

Programming Related Skills

- Understandable code and comments
- Git / Github
- Embedded systems development
- Low level programming
- Data structures
- File system structures
- Data compression methods
- Hardware emulation
- Machine language design
- Programming language design
- Implementing from data sheets
- Implementation of [de]serialization methods
- Implementation of text and language processing
- Image processing
- Algorithms, algorithm design
- Writing command line utilities
- Code optimization
- Reverse-engineering
- Strong understanding of digital logic
- Reading and interpreting raw data

Software Skills

- Linux terminal
- SSH and SCP
- Linux firewall configuration and port-forwarding
- Windows CMD
- Utilizing command-line utilities
- Blender
- Unity
- Jetbrains IntelliJ
- Jetbrains PyCharm
- Microsoft Visual Studio and alternatives/derivatives
- Adobe Substance Painter and alternatives
- Adobe Photoshop and alternatives
- Microsoft Office and alternatives
- Misc. Image editing software
- Misc. Video editing/processing software
- ffmpeg
- WSL2
- Hex editors
- Remote desktop software
- OBS

GitHub Portfolio

- I have contributed thousands of hours into my projects on GitHub, which can be found at <u>https://github.com/beckadamtheinventor</u>.
- M3EC Minecraft Multi-Mod Environment Compiler, a python script that generates Java code for Minecraft mods using a custom data generation language.
- symtree a fast string-indexed dictionary data structure library, written in C.
- noti-ez80 an open-source boot rom written in assembly, for use with a TI-84+CE emulator.
- BOS an open-source OS for TI-CE calculators and emulators. The result of 3+ years of bare-metal ez80 programming, and aims for full compatibility with most existing community-developed software. I actively develop it to this day.

AWARDS

• Academic Achievement Award (2017, 2018, and 2019 academic years, Thomas Moore Academy)

PERSONAL INTERESTS

- Low level programming
- Game design/development/programming
- Software design/development/programming
- 3D modeling
- Interactive media/storytelling

EXTERNAL LINKS

- LinkedIn: <u>https://www.linkedin.com/in/adam-beckingham-b186a0228/</u>
- GitHub: <u>https://github.com/beckadamtheinventor</u>
- Responsive Web Design Certificate:
 <u>https://www.freecodecamp.org/certification/beckadam/responsive-web</u>
 <u>-design</u>
- Javascript Algorithms and Data Structures Certificate: <u>https://www.freecodecamp.org/certification/beckadam/javascript-algor</u> <u>ithms-and-data-structures</u>