Michael T. Bowen

(585) 635-8255 | Software Developer

Portfolio: bichaelmowen.com | Michael@thebowenfamily.com
Linkedin: Michael Bowen | GitHub: BowenMichael

Experience

Junior Software Developer | Rigorous Tech   Jul 2024 - Present
    | C++ | Fanuc | Typescript | React | Sub/Pub model | Burlington, VT

- Took ownership of the palletizing application by developing the UI and the robot motion planning program.
- Increased communication speeds in a proprietary Fanuc device driver by 50%. Reduced Ethernet/IP calls over CIP to read all fanuc registers in a single communication.
- Removed excess motion resulting in a 2x speed increase cutting our cycle times in half.
- Managed DCS settings on the Fanuc to handle changing payloads so that the robots can run in collaborative mode removing the need for additional safety fencing.
- Created a 3D world to map the robot scene to a virtual mirror. This allows for collision detection and path planning.
- Rigorously tested and documented user behaviors to ensure proper fault detection and recovery.

Full Stack Developer | Cinquefoil Solutions   May 2022 - June 2024
    | Typescript | Next.js | MongoDB | CI/CD | *(Remote)*Rochester, NY

- Converted window quoting spreadsheets to a custom CRM web application.
- Built the application from scratch updating it based on the needs and requirements of the client.

VR Software Developer | Emergent Media Center   Sep 2021 - Dec 2021
    | C# | Unity | Virtual Reality | Burlington, VT

- Integrated 3rd party olfactory VR technology into Unity VR for the Well-be OVR meditation project.

Education

Champlain College | Burlington, VT   Graduation: May 2023
    Bachelor of Science Degree in Game Programming, GPA: 3.7
    Applied skills: Forward and Inverse Kinematics; 3D Collisions; Realtime Networking;
    Demo Reel: https://youtu.be/_evFuQ-EVoc

Semester Abroad | Montreal, QC   Jan 2022 - May 2022
    Studied under game industry professionals and competed in the Ubisoft game lab competition.

Projects

Climb Burly | Social Media and Video Editing   May 2023 - Present
    | TikTok | Youtube | Instagram |

- Providing accessibility to outdoor rock climbing by following a "Document First" philosophy.

Deal Pedal | DevOps and Lead Programmer   Sep 2022 - May 2023
    | Blueprints | C++ | Unreal 5 | Google Cloud | Jenkins | Git |

- As lead created videos to help the design team to work with complex technologies.

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React Flow Blend Graph | Web / Animation Programmer   Jan 2023 - May 2023

| C | Animal3D | Next.js |

- Created 3D animation architecture for the matrix math behind forward and inverse kinematics
- Developed a web-based solution for managing blending of animations.