ibapps39

Phone Number | ibapps39@gmail.com | linkedin.com/in/ibrown39 | github.com/ibapps39 | ibapps39.github.io

Education

Colorado State University — Aurora, CO
Bachelor of Science in Computer Science — *Aug. 2019 – Feb. 2021*

Colorado State University — Fort Collins, CO
Bachelor of Economics, Minor in Political Science — *Aug. 2015 – Dec. 2018*

Experience

Substitute Teacher, TAGG — Dec. 2024 – Present
Primarily Denver Area — *Various, CO*

- Worked with various age groups K-12th Grade, both special needs and gifted
- Troubleshooted and implemented solutions for Windows, Mac systems, devices, and various peripherals.
- Taught wide array of subjects, including but not limited to home-room, English, Computer Science, Art, Social Studies, Spanish, and more.
- Communicated and coordinated with, and reported to, administrators, staff, and teachers to meet dynamic, need based goals.

IT Consultant, LogaDosia LLC. — May 2024 – June 2024
Hybrid, Remote — *Parker, CO*

- Acting/Interim CTO, working with product managers to define solutions for business needs in software and application development.
- Designed and implemented web and mobile app infrastructures, establishing clear project roadmaps.
- Led technical strategy for hybrid environment, focusing on on-premises and cloud-based solutions.
- Utilized Draw.io to visualize systems architecture and collaborate with stakeholders.

Software Developer I, Mphasis — Dec. 2021 – May. 2022
Remote — *Centennial, CO*

- Developed software solutions using Java, C/C++, and MySQL in a collaborative IT team.
- Worked with hybrid cloud infrastructure and contributed to Agile software development.
- Employed best practices in testing, code reviews, and documentation.
- Collaborated with cross-functional teams to resolve technical issues and ensure high-quality software.

Projects

GeometryDropCpp | *Cpp/C++, Makefile, raylib* — Mar. 2025 – Present

- Unit Tested, Optimized, game utilizing the popular game making library raylib.
- Fine-grain collisions, mechanics, and resource light.
- Dynamic, deployable, and playable on multiple platforms.

PoliCycle | *C/C++* — March 2024 – Present

- Implement complex, real-time mechanics modeling a small, realistic economy including ESG factors
- Challenge of refactoring AI generated code into functional, clean, unit tested, and compliant software.
- Documented project and shared it on GitHub for open-source community.

iosGPUCalculate | *Swift, SwiftUI, Metal* — Oct 2024 – Present

- Designed and implemented a Metal-based compute shader for high-performance GPU calculations.
- Created real-time visualization tools for CPU/GPU performance metrics and scalability testing.
- Optimized vector calculations for large datasets, handling up to 1 million elements.

FoldAR | *Swift, Storyboard, visionOS* — Aug 2023 – Dec 2023

- Developed an AR app with real-time point tracking using iOS computer vision and Vision framework.
- Utilized Python and Jupyter notebooks for model training and data point tracking analysis.
- Collaborated on user-friendly AR interfaces for iOS devices.
- Met graduate school computer science course standards.

Technical Skills

Languages: C, C++, C, Swift, Java

Frameworks and Libraries: raylib, SDL2 Metal, Arduino

Tools: Git, GitHub, GitLab, VS Code, Xcode, Eclipse, Visual Studio

Cloud: Google Colab, GitHub

Databases: MySQL, SQLite

Technologies: iDevices(iPhone, iPad, etc), Mac, PC, Linux