

# ibapps39

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## EDUCATION

### Colorado State University

*Bachelor of Science in Computer Science*

Aurora, CO

Aug. 2019 – Feb. 2021

### Colorado State University

*Bachelor of Economics, Minor in Political Science*

Fort Collins, CO

Aug. 2015 – Dec. 2018

## EXPERIENCE

### Substitute Teacher, TAGG

*Primarily Denver Area*

Dec. 2024 – Present

*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.

*Hybrid, Remote*

May 2024 – June 2024

*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

*Remote*

Dec. 2021 – May. 2022

*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