

Alfonso T Canady Jr

Software Dev | Game Dev | Instructor

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[Portfolio](#) | [Github](#) | [LinkedIn](#)

Software developer with 2+ years of software development experience with strong analytical, mathematical, logical, and communication skills

TECHNICAL SKILLS

Languages: C, C++, HTML, CSS, JavaScript, Java, LUA, C#, Python

Tools: Linux CLI, Unity, Git, Github, PowerShell, Agile

EXPERIENCE

Integration Innovation Inc – Unity Developer
Dec 2021 – Present

- Develop software and systems for use in training military personnel by modeling various military vehicle and air defense capabilities and concepts.
- Work under SCRUM master to produce clean and efficient code.
- Follow storyboards provided by ISDs (Instructional Systems Designers) and work with SMEs (Subject Matter Experts) to develop content in Unity for use in training military personnel.
- Obtain and maintain DoD Interim Secret Clearance.

ProTec - Japan (Yokota Air Force Base)
Oct 2020 – Jan 2021

- IT Training position
- Installed and maintained electrical systems under the supervision of lead engineer

Cinilope – Lead Software Engineer (Part-Time)
June 2020 - Present

- Designed and developed code for behavioral modeling of drones or other UAVs to simulate their performance in a virtual environment using Unity.
- Developed and maintained mobile applications for Android, Apple, and Windows Holo Lens platforms involving drone flight simulations
- Developed backend C# scripts to enhance program capabilities.
- Refactored existing code and implemented appropriate data structures and algorithms to reduce time and space complexity.
- Refactored existing code to follow proper Object Oriented Programming principles.

Code Crew Code School – Lead Instructor
February 2021 - August 2021

- Developed Full Stack Developer curriculum in conjunction with Seattle's Code Fellows Coding Boot Camp
- Trained Teaching Assistants in teaching techniques and software development practices

- Instructed beginner – advanced CS Courses on Full-Stack software development

Code Crew – K-12 Instructor and Curriculum Designer

May 2019 - October 2020

- Designed and Developed Computer Science Curriculum for K-12
- Developed CS and Teacher Training for K-12 Instructors and Teaching Assistants

EDUCATION

Rhodes College- Memphis, TN

B.S Computer Science (Minor in Mathematics) 3.5 GPA – 2019

AWARDS

Memphis Flyer 20 under 30 award recipient: [Memphis Flyer | 20 < 30 The Class of 2022](#)

PROJECTS

Ecosystem Simulation – Unity / C# / Artificial Intelligence [/Github Repo](#)

- Developed natural selection simulation modeling relationship between prey and available food in the environment.
- Created a system for genetic variation allowing set attributes a chance to mutate to the next generation resulting in an agent more “fit” to survive in said environment.
- Utilized OOP Principles

BlackJack_Cpp – Windows Console / C++ / OOP Principles [/Github Repo](#)

- Console application where two users can bet and play against a dealer in a game of blackjack.
- Used OOP principles: inheritance, encapsulation, polymorphism, and abstraction to develop clean and easily readable code minimizing if/switch statements.
- Utilized user input validation in various locations so that only expected values are allowed to be input, an incorrect value will prompt the user for another until a correct one is given.

Coding Challenges (Featured) – Java / C# [/ Github Repo](#)

- Various programming challenges written in Java to both learn the language and challenge myself to write not only working but optimal and fast Java code.
- Merging two sorted arrays (Doing so in place to save on space in $O(m+n)$ time)
- Determine if an array contains any duplicates (Utilizing a Java HashSet to develop a solution with $O(n)$ time complexity)
- Find the first bad version x in a continuous list of length n where at x all versions $> x$ are bad and all versions $< x$ are good. (Solution uses an implementation of Binary Search to run in $O \log(n)$ time)
- Also implemented Linked List / Queue/ and Trie in C# and other challenges in Java.

Additional projects and code available at <https://acanady.github.io/#projects>