

# TIFFANY L. COELHO

## SOFTWARE DEVELOPER

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## OBJECTIVE

Junior Computer Science student seeking internship experience in the software or cybersecurity industry.

## EDUCATION

### B.S. in Computer Science

Fairleigh Dickinson University | Madison, NJ

Expected: May 2025

Honors Program

Concentration in Cybersecurity

### B.A. in Computer Science

Cornell University | Ithaca, NY

Transferred: May 2023

GPA: 3.3

Dean's List Fall 2021 & Fall 2022

## PROFESSIONAL EXPERIENCE

### C++ Programming Teaching Assistant

Cornell University - Bowers CIS | Ithaca, NY

Aug 2022 - Dec 2022

Held weekly office hours assisting students on homework assignments and lecture concepts. Attended TA meetings and contributed significant course suggestions. Provided feedback and grades for 20 student assignments weekly.

## COURSEWORK EXPERIENCE

### Computer System Organization & Programming

Cornell University | Ithaca, NY

Aug 2022 - Dec 2022

#### RISC-V Processor

Implemented a single-cycle processor from scratch using Logisim. Supported arithmetic, logic, and memory operations. Designed a test file and a small byte reversal program—both in RISC-V—to ensure the processor's correctness.

#### Build-a-Cache

Collaborated in a group of three to write a C program that simulates the behavior of a cache. Evaluated the impact of cache size, associativity, block size, *etc.* on cache performance for different cache configurations and coherence protocols.

### Data Structures & Functional Programming

Cornell University | Ithaca, NY

Jan 2022 - May 2022

#### Adventure Augmented

Developed a text adventure game engine, complete with a win/lose condition, the ability to collect items, and two sample adventures. Programmed using OCaml and Visual Studio Code.

#### Robot Meta-Language (RML)

Interpreter Created an evaluator for a non-trivial programming language with OCaml and Visual Studio Code. Designed abstract syntax trees to support constants, basic operations, functions, data types, sequences, references, and asynchronous expressions.

### Object-Oriented Design & Data Structures (Honors)

Cornell University | Ithaca, NY

Aug 2021 - Dec 2021

#### Simulating Evolving Artificial Life

Collaborated in a group of three to simulate a world of animals ("critters") that wander, eat food, reproduce, and evolve. Built a graphical visualization enabling users to control the critters. Implemented fault injection to mutate each critter's genome—a program determining their behavior—through reproduction. Developed an interpreter and simulator to evaluate and execute the genome.

## TECHNICAL SKILLS

Windows, IntelliJ, Visual Studio, Visual Studio Code, Git, GitHub, Unity, Godot, C/C++, Java, Lua, OCaml, Python