# Benjamin Ledoux

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#### Education

#### Northwestern University

Sep 2024 - Dec 2025

MS in Computer Science

o GPA: -/4.0

o Coursework: Algorithm Design and Analysis, Artificial Intelligence, Machine Learning

## Connecticut College

Sep 2020 - May 2024

BA in Computer Science

o GPA: 3.85/4.0

 Coursework: Algorithms, Software Engineering, Computer Architecture, Data Structures, Object-Oriented Software, Digital Sound Processing

# Experience

IT Support

Beverly, MA

June 2023 - Aug 2023

Massachusetts Task Force 1

Mapping out local fiber network Setup and maintenance of security camera network

Ammerman Scholar

New London, CT

Ammerman Center for Arts and Technology

Jan 2022 - May 2024

• Competitive certificate program

• Conducted independent study in intersection of art and technology (See Procedural Generation Framework)

# Teaching Assistant

New London, CT

Connecticut College Computer Science Department

Sep 2022 - May 2024

- Tutoring of Intro, Computer Architecture, and Entertainment Software courses, including office hours and conducting labs
- Used proficiency with Python, C#, and Unity to guide students in assignments and projects

#### **Projects**

#### Bot Bowl Evolution

- Evolved a competitive agent for Bot Bowl 🗹 using a genetic algorithm to refine an expert system.
- o Tools Used: Python, OpenAI Gym

#### Procedural Generation Framework

- o Developed a framework for procedural generation of tilemaps in Unity, primarily for world generation
- ∘ Tools Used: C#, Unity

### Multiple Fundamental Frequency Estimation

- o Developed a program to analyze a sound file and determine the fundamental frequencies present
- o Tools Used: MatLab

## **Technologies**

Languages: Python, C++, C#

Technologies: Unity