# Benjamin Ledoux

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**in** benjamin-j-ledoux   🔘 bledoux2002

## Education

**Northwestern University** *Sep 2024 – Dec 2025*
*MS in Computer Science*
- GPA: 3.67/4.0
- **Coursework:** Algorithm Design and Analysis, Artificial Intelligence, Machine Learning

**Connecticut College** *Sep 2020 – May 2024*
*BA in Computer Science*
- GPA: 3.86/4.0
- **Coursework:** Algorithms, Software Engineering, Computer Architecture, Data Structures, Object-Oriented Software, Digital Sound Processing

## Experience

**IT Support** *Beverly, MA*
*Massachusetts Task Force 1* *June 2023 – Aug 2023*
- 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.
- Tools Used: Python, OpenAI Gym

**Procedural Generation Framework** ↗
- Developed a framework for procedural generation of tilemaps in Unity, primarily for world generation
- Tools Used: C#, Unity

**Multiple Fundamental Frequency Estimation** ↗
- Developed a program to analyze a sound file and determine the fundamental frequencies present
- Tools Used: MatLab

## Technologies

**Languages:** Python, C++, C#

**Technologies:** Unity