Benjamin Ledoux

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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, Deep Learning, Networking, Computer Graphics

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, Game Design, VR Environments

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