Benjamin Ledoux

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EDUCATION

Northwestern University, Evanston, Illinois   Master of Science expected Fall 2025
Major: Computer Science   GPA: -
Relevant Courses:
Connecticut College, New London, Connecticut   Bachelor of Arts, May 2024
Major: Computer Science, Dean's High Honors   GPA: 3.86
Selected Scholar: Ammerman Center For Arts and Technology   Certificate, May 2024
Relevant Courses: Data Structures, Discrete Math, Computer Organization, Algorithms, Software Engineering, Object-Oriented
Software Design, Entertainment Software Design, Graphics & Virtual Environments, Digital Sound Processing

SKILLS

Programming: Python, C#, Java, C++, JavaScript, Unity C#, Unreal Engine 5

INNOVATION AND PROJECTS

Evolving Bot Bowl Agent with Genetic Algorithm, Python, Research   Spring 2024
- Using a genetic algorithm to evolve a rules-based expert system into a competitive Bot Bowl agent
- Variables in the expert system are exposed to the genetic algorithm for better performance against a baseline

Dynamic Environment Generation, Unity C#, Senior Integrative Project   Fall 2023 - Spring 2024
- General-purpose tool for procedurally generating tilemaps in the Unity Real-Time Development Platform.

Diegetic Guidance in Virtual Environments, Unity C#, Research   Fall 2023
- Researching several diegetic methods for guiding users through virtual environments.

Overbrewed, Unity C#, Game Jam   Winter 2023
- For 3-day Cozy Winter Game Jam, developed solo, 2D top-down view arcade game
- Overcooked parody, player makes hot cocoa orders for guest using ingredients found around kitchen

TTRPG Charactermancer, Python   Spring 2022 - Present
- Text-based character creation and management system for the Fallout 2d20 TTRPG

See Website for Further Projects

RELEVANT EXPERIENCE

Ammerman Center for Arts and Technology, Connecticut College, New London, CT   January 2021 - May 2024
Scholar
- Competitive Certificate Center for developing integrative projects relating to arts and technology over 3 years
- Develop a project working with procedural generation for creating dynamic environments
- Conduct research to present at the All College Symposium during the senior fall semester

Computer Science Department, Connecticut College, New London, CT   August 2022 - May 2024
Teaching
Assistant
- Assisted students with projects and work during group sessions and class
- Graded large amounts of programming assignments and students' weekly work, leaving insightful feedback
- Assisted faculty by facilitating learning Python, Computer Organization, and Unity C# skills in large groups

Massachusetts Task Force 1, Beverly, MA   June 2023 - August 2023
Intern
- Prepared tools and resources to assist in daily operations and network upkeep
- Developed a network map of Task Force resources
- Worked with and maintained security networks and systems

GameStop, Salem, NH, and Dracut, MA   May 2021 - August 2021
Associate
- Used internal software to manage accounts and store resources, organized store

LEADERSHIP & COMMUNITY ENGAGEMENT

CS Student Advisory Board, New London, CT   August 2023 - May 2024
Communications • Planned and prepared for events, designed posters and emails, managed social media accounts
Manager • Contributed to new resource page for CS students formatted as a GitHub repository

Varsity and Club Volleyball/Soccer, Methuen, MA and New London, CT   August 2017 - May 2024
Captain, Player • Captained varsity high school teams, brought experience to the university club teams
- Received Unsung Hero Award for commitment to team spirit