# Sean P. May

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## **EDUCATION**

Northeastern University | Khoury College of Computer Sciences, Boston, MA

Sep. 2022 - Present

Expected Dec. 2026

Candidate for Bachelor of Science in Computer Science and Mathematics Cumulative GPA: 3.64 / 4.0 Honors: Dean's Scholarship, Dean's List, Fall 2024 & Spring 2025

Activities: Bridge to Calculus Tutor, Calculus Field Day Volunteer, Math Club, Putnam Club, Running Club

Relevant Coursework: Artificial Intelligence, Matrix Methods in ML, Algorithms & Data Structures,

Object-Oriented Programming, Computer Systems, Probability & Statistics

Summer Study | Mathematical Heritage of Budapest, Budapest, HU

Jun. – Aug. 2025

**Relevant Coursework:** Number Theory, Exploration of Modern Mathematics

**SKILLS** 

Part-Time Work: Semi-Professional Poker Player, Computer Science Tutor

Proficient: Python, Java, C, Latex, Bash, React, Racket | Familiar: C++, JavaScript, Assembly Languages:

**Tools & Libraries:** PyTorch, Pandas, NumPy, Matplotlib, Git, Neovim, Codespaces, Jupyter

**Platforms:** Windows, MacOS, Ubuntu Linux

Human Digit Classification | Python | JavaScript | HTML | PyTorch | Machine Learning | O

Jan. – Mar. 2025

- Developed a computer vision web app demonstrating CNN capabilities for real-world applications.
- Applied novel approach, using two models to first create a bounding box, then classify number of digits.
- Engineered image annotation tool to streamline data labeling, allowing for creation of own datasets.

Counterfactual Regret Exploration | Jupyter Notebook | NumPy | Reinforcement Learning | O Nov. 2024 - Present

- Researching CFR-Min, an RL algorithm for finding Nash Equilibria in sequential, imperfect-information games.
- Constructed examples to solve for equilibria in Colonel Blotto games, as well as Kuhn Poker.
- Currently working on general application for sequential games, such as Risk or Poker.

## NLHE Alpha-Beta Pruning | Python | NumPy | O

Aug. – Dec. 2024

- Employed adversarial search to navigate and solve game tree, with alpha-beta pruning to reduce complexity.
- Applied Monte Carlo simulation, hand bucketing, and a probabilistic hand range model to greatly reduce game space, as well as transform NLHE into a complete-information, deterministic game.

Linux Shell | C | Data Structures | Concurrency | O

Oct. 2024

- Reconstructed a fully operational Linux Shell program in C, replicating command execution, signal handling, etc.
- Implemented piping, input and output redirection, and sequential command execution using child processes.
- Created custom commands, such as source, prev, cd, help, and a verbose toggle for debugging purposes.

### WORK EXPERIENCE

# **General Dynamics Electric Boat**

Groton, CT

Software Development Co-op

Administrative Assistant

Jan. 2024 – Jul. 2024

- Initiated a project to automate database accuracy, utilizing ServiceNow's REST API, resulting in reassignment and enhancing the tracking of nearly 1000 company assets.
- Automated XML transformation testing for the Software Development team using Python and Batch scripting, presenting results in easily digestible format, allowing for efficient review and reformatting.
- Developed proprietary Python library for transforming, reading, writing, and conversion of CSV and JSON files.

## **Defense Information Systems Agency**

Fort Meade, MD

Jun. 2023 – Sep. 2023

- Maintained and updated records and databases, ensuring data accessibility for DISA's mission.
- Obtained a secret security clearance, completing a thorough background investigation and interview process.
- Supported the effort to transfer thousands of employees to a cloud-based software suite.
- Facilitated communication within the organization between administration and colleagues.

# **Interests**