

Ella Demarest

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Internship/Co-op Availability: Late August – December 2025

Portfolio: www.ellademarest.com | LinkedIn: <https://www.linkedin.com/in/ella-demarest-b48553189/>

EDUCATION

Northeastern University, Boston, MA Aug. 2022 – Present
Khoury College of Computer Sciences May 2026
Candidate for a Bachelor of Science in Computer Science GPA: 3.83/4.0
Computer Science Concentration: Human-Centered Computing
Honors: Dean's List | Honors Program/Scholarship
Relevant Coursework: Discrete Structures | Algorithms and Data | Object Oriented Design | Mobile Application Development | Fund. of Software Engineering | Web Dev. | Human Computer Interaction | Empirical Research Methods | Found. of Data Science | Computer Systems | Database Design | User Experience Design | Found. of Cybersecurity | Digital Design

TECHNICAL KNOWLEDGE AND CERTIFICATIONS

Languages: Java | Python | Swift | TypeScript | Racket | Lua | C# | C | Assembly | HTML | CSS | SQL | LaTeX | PHP | SystemVerilog

APIs, Frameworks, & Libraries: React | Firebase | Postman | Jest | Laravel | Blade

Certifications: Oracle Certified Associate Java SE 8 Programmer | Certified Veeva CRM & Vault Associate

Applications: Adobe Creative Suite | Blender | Substance Painter 3D | Figma | Axure | IntelliJ IDEA | Eclipse | Google Web Designer | Xilinx Vivado | XCode

PERSONAL AND ACADEMIC PROJECTS

Power Rock Fitness (Swift) Boston, MA | Nov. 2024

- Provides different experiences for two user types: Fans and Stars
- Creates a profile indicating user's music tastes and generates a customized set of in-app workouts
- Allows browsing an entire library of workouts with filtering by band, genre, and workout name, as well as collection of Power Points by completing various levels of workouts
- Enables Stars to register their band and use the app tools to create workouts they endorse for their fan, creating an unlimited number of sets and exercises, indicating the difficulty, and setting a cover.
- Uses Firebase for authentication and data storage.

Robux Conversion Tool (Lua) Seattle, WA | Jun. 2023

- Computes any relevant conversion regarding Robux
- Calculates Robux to local currency and vice versa in terms of devEx rates
- Displays their earnings with taxes subtracted upon input of local tax rate

Maze Visualizer (Java) Boston, MA | Apr. 2023

- Generates a random maze of custom dimensions and allows user to navigate it using the arrow keys
- Visualizes how the "breadth-first search" and "depth-first search" algorithms would solve the maze, as well as the answer/shortest route to the end

Flood Game (Lua) Boston, MA | Mar. 2022

- Incorporates algorithmic thinking to implement main game functionality
- Includes variable settings (board size, number of colors, and flood speed), as well as a competitive aspect (players can accumulate points and compete on an in-game leaderboard)

Amino Acid Residue Frequency Analysis Program (C#) San Diego, CA | Jan. 2019

- Enables consensus-based protein design (collaboration between academic laboratory and a major pharma)

WORK EXPERIENCE

Regeneron, Armonk, NY | *Development Services & Operational Excellence Intern* May. 2025 – Aug. 2025

- Analyzed the performance of an AI-driven tool to sort through differing clinical trial regulations compared to the current, manual method
- Compile and present findings to team

Boudreau Lab, Northeastern University, Boston, MA | *Research Assistant* Oct. 2024 – Present

- Conceptual development and user interface design for the early stages of an upcoming app for researchers
- Compiled inputs and outputs for calls to AI and helped plan a custom chat LLM to be realistic and engaging

Vue Health, Boston, MA | *Digital Co-op, Freelance Contractor* Jan. 2024 – Oct. 2024

- Built custom Wordpress themes using PHP, HTML, and Tailwind CSS linked with Advanced Custom Fields

- Created an Interactive Visual Aid utilizing Nunjucks and Laravel Blade templating engines, PHP, Tailwind CSS/HTML, and Javascript
- Used Google Web Designer to create animated, dynamic ads for a client
- Designed emails with HTML/CSS for clients and tested in Veeva CRM

Code4Community, Boston, MA | *UI Designer*

Jan. 2023 – Sep. 2023

- Designed software for 77 employee, \$2 million yearly revenue non-profit
- Built prototype and mock-ups for non-profit payroll software
- Collaborated on prototype and mock-ups for software tracking non-profit funding sources

MistyPhantom Designs, San Diego, CA | *Freelance Artist*

Mar. 2017 – Present

- Produced art, UI, and graphic design for front-page and ~100 other Roblox games including Mining Simulator and Ghost Simulator (merch sold at Walmart and Amazon)
- Led graphic design for two games in development (equity interest)