# Ella Demarest

(858) 222-7877 | Local: Boston, MA | Permanent: San Diego, CA | <u>ellajdemarest@gmail.com</u> Internship/Co-op Availability: Full-time Late August – December 2025 Ella Demarest Portfolio | LinkedIn

#### **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 (Selected) Coursework: Discrete Structures | Algorithms and Data | OOD | Mobile App Dev | Fund of

 $Software\ Engin\ |\ Web\ Dev\ |\ Database\ Design\ |\ Data\ Science\ |\ Comp\ Systems\ |\ Human\ Comp\ Interaction$ 

## TECHNICAL KNOWLEDGE AND CERTIFICATIONS

**Languages:** Java | Python | Javascript | TypeScript | C | Lua | Swift | Racket | 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/Other:** Node.js | XCode | MongoDB | Xilinx Vivado | Adobe Creative Suite | Blender | Substance Painter 3D | Figma | Axure | IntelliJ IDEA | Eclipse | Google Web Designer

#### RECENT (SELECTED) PROJECTS

#### Pokemon Sleep Research Hub (Javascript)

Boston, MA | Feb. 2025

- A full-stack web <u>community forum</u> built in React allowing Pokemon Sleep players to create, like, comment, and filter posts by tags
- Allows users to create a personalized profile, including their trainer code, which is displayed on the 'Friend Finder' billboard that they can choose to hide, show to registered users, or leave public

## **Power Rock Fitness (Swift)**

Boston, MA | Nov. 2024

- An app that allows bands to use in-app tools to create workouts they endorse and fans to browse a personalized library of workouts with accountability features
- Uses Firebase for authentication of the two user types (fans and stars) and the workout library

#### **WORK EXPERIENCE**

**Regeneron,** Armonk, NY | Development Services & Operational Excellence Intern

May 2025 – Aug. 2025

- Analyze AI software metrics to estimate cost savings, evaluate software utilization, and recommend efficiency improvements
- Write program to compare and evaluate multiple Standard Operating Procedures

## **IoT Open Innovation Lab,** Northeastern University, Boston, MA | *Research Assistant*

Oct. 2024 – Present

- Developed the conversation engine for a digital twin networking app using an LLM orchestration framework with agents for scenario generation and turn-based conversations
- Developed the system that auto-generates user profiles based on a researcher's LinkedIn by using a custom scraping program as well as API calls to OpenAI
- Created the image generation in the app by utilizing API calls to several Stable Diffusion models tweaked to suit the style of the app: including a program that extracts the user's LinkedIn profile picture and uses a custom Postman API to properly cartoonify the photo into an avatar in the app
- Iterative wireframing and game design

### **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
- Designed emails with HTML/CSS for clients and tested in Veeva CRM

#### Code4Community, Boston, MA | UI Designer

Jan. 2023 – Sep. 2023

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