

HAYLIE PEDERSEN

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Availability: July – December 2026

EDUCATION

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

Expected: May 2027

Candidate for Bachelor of Science in Computer Science

GPA: 3.82/4.00 (Dean's List)

Concentration in Artificial Intelligence | Minor in Psychology

Highlighted Courses: Object-Oriented Design, Algorithms & Data Structures, Software Engineering, Systems, Databases

Activities: Northeastern Electric Racing, NU Women in Technology, Lead360 Program, Cheese Club

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Java, Python, C/C++, HTML, CSS, SQL

Frameworks/Libraries: React, TanStack Query, Tailwind, Flask, FastAPI, Express, JUnit, Streamlit, Prisma

Software/Tools: AWS, Git, Figma, Docker, Redis

EXPERIENCE

Verizon Communications (NExT) | Boston, MA

Jul 2025 – Dec 2025

Software Engineer Co-op

- Architected a full-stack telecommunications sentiment analysis platform using React/TypeScript and FastAPI/Python, deployed on AWS infrastructure (Lambda, S3, ECS, RDS PostgreSQL) with responsive design patterns.
- Maintained automated ETL workflows and data ingestion pipelines with daily triggers to aggregate and transform sentiment and network data from 5+ external sources, revealing geospatial hotspots across all 50 US states.
- Developed Isolation Forest anomaly detection system, flagging emerging issues for proactive trend monitoring.
- Enhanced performance and upgraded key packages, reducing load times by 30% with TanStack Query.

Northeastern Electric Racing | Boston, MA

Sep 2024 – Present

Software Developer

- Collaborate with 60+ developers in an Agile environment to build a management platform serving 400+ members.
- Implement database schemas and API endpoints for operations such as role-based access and project tracking.
- Design UI components that adapt seamlessly across devices, enhancing accessibility and member engagement.

Northeastern Office of Student Employment | Boston, MA

Jan 2024 – Present

Office Assistant

- Address phone inquiries, collaborating with students to identify and implement solutions for employment concerns.
- Process and respond to 10+ daily service-now.com tickets with 98% resolution rate within 24 hours.
- Manage Workday processes for a student body of 30,000+, ensuring accurate employment records.

PROJECTS

ResearchCompass | React, TypeScript, Tailwind, Python, Flask

Jul 2025

- Built a recommendation engine leveraging vector embeddings to match research abstracts with publication venues.
- Designed wireframes in Figma and built a responsive, user-friendly interface with React and Tailwind CSS.
- Integrated academic databases (DOAJ, arXiv) to provide targeted journal recommendations ranked by relevance.

Aurora | React, JavaScript, CSS

Dec 2024

- Implemented dynamic user interactions with React hooks and state management for optimal performance.
- Leveraged Spotify's API to process 1000+ songs in real time and provide personalized playlist recommendations.

PetFetch | MySQL, Docker, Pandas, Python, Flask, Streamlit

Aug 2024

- Designed and implemented REST APIs in Flask, developing routes to support 15 CRUD operations.
- Adopted a Git-based version control to streamline collaboration, and maintain a clean, well-documented codebase.

SKILLS & INTERESTS

Skills: Problem Solving | Motivation | Creativity | Adaptability | Group Leadership & Collaboration

Interests: Hand Lettering | Traveling | Tea Tasting | Fitness | Fantasy Fiction