

# Haylie Pedersen

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Availability: July – December 2026

## EDUCATION

**Northeastern University** | Khoury College of Computer Sciences 3.82/4.00 – Dean's List  
Candidate for Bachelor of Science in Computer Science Expected May 2027

- Concentration in Artificial Intelligence | Minor in Psychology

**Highlighted Courses:** Object-Oriented Design, Algorithms & Data Structures, Computer Systems, Database Design  
**Activities:** Northeastern Electric Racing (Developer), 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

## EXPERIENCE

**Verizon Communications (NExT)** July 2025 – December 2025  
Software Engineer Co-op Boston, MA

- Architected a full-stack telecommunications sentiment analysis platform using React/TS 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** September 2024 – Present  
Software Developer Boston, MA

- Collaborate with a cross-functional team of ~60 developers in an Agile environment to build a full-stack club management platform, serving 400+ active members
- Implement database schemas and API endpoints supporting operations including role-based access control, Gantt project tracking, change request workflows, finance monitoring, and competition rule documentation

**Northeastern Office of Student Employment** January 2024 – Present  
Office Assistant Boston, MA

- 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 July 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 December 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 August 2024

- Designed and implemented REST APIs in Flask, developing routes to support 15 CRUD operations
- Built a responsive UI using Streamlit, creating a cohesive user experience with pages tailored to personas

## SKILLS & INTERESTS

**Skills:** Problem Solving | Motivation | Creativity | Adaptability | Group Leadership & Collaboration  
**Interests:** Hand Lettering | Traveling | Tea Tasting | Fitness | Fantasy Fiction