# Abigail Nicholas

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#### **Education**

#### Northeastern University | Boston, MA

May 2026

# Candidate for Bachelor of Science in Mechanical Engineering & Design GPA: 3.74

- Honors: Dean's List (2022, 2023), Connections Scholarship Recipient
- Design Courses: Design: Processes & Practices, Design Perspectives, Experience and Interaction, Color and Composition, Modern Art History
- Engineering Courses: Mechanics of Materials, Thermodynamics, Statics, Differential Equations and Linear Algebra, Calculus II-III, Physics I-II, Cornerstone of Engineering I-II
- Activities: Society of Women Engineers, Acoustical Society of America, Alliance of Civically Engaged Students

# Newton High School | Newton, NJ

June 2022

- Honors: Valedictorian, Rensselaer Medal, University of Rochester Xerox Award, National Honor Society, Spanish Honor Society
- Activities: STEM Academy (Student Coordinator), Technical Theatre (Stage Manager), Field Hockey (Varsity Captain, Coaches' Award Recipient 2021, 2022)

## **Work Experience**

# Sound Technician | Newton, NJ

Dec 2021 - Present

- · Customize sound arrangement, patching venue equipment to facilitate a successful performance
- Operate Soundcraft Si Impact 40-channel Digital Mixer for 3+ annual events held at Newton High School

#### Math Tutor | Newton, NJ & Boston, MA

Dec 2019 - Present

Conduct weekly in-person and virtual tutoring sessions, designing lessons to reinforce math with students K-12

#### Pool Crew Member | Lake Mohawk Country Club | Sparta, NJ

May - Aug 2023

- Processed concession stand transactions using Jonas Club Software, aiding an efficient kitchen atmosphere
- Supported a safe and respectful environment for members and coworkers

#### **Academic Projects**

#### **Dream Capture | Design: Processes & Practices**

Fall 2023

- Designed an experiential intervention in collaboration with a team of three to improve the morning routine
- Developed an app prototype in Figma, navigating a dream commission service to connect users with artists

# Vermicomposting Museum Exhibit | Cornerstone of Engineering I-II

Fall 2022

- Developed an educational museum exhibit addressing a sustainability topic, the vermicomposting process, appealing to a young audience
- Fabricated device components in SolidWorks and AutoCAD and integrated 360 servo motor, arcade buttons, open circuits, and LED strip using Arduino
- · Applied value sensitive design by adding graphic, auditory, and tangible elements, establishing a sensoryappealing, accessible, and bilingual experience

## **Community Service**

## Tutor Coordinator | EVkids | Boston, MA

Sep 2022 - Present

- Organize tutor recruitment and community events, fostering community within the organization
  - 2023 Expanding Horizons Gala facilitated check-in and auction, achieving a positive guest experience
- · Meet weekly with a student to review academic progress and to develop an interpersonal relationship

## **Active Blood Donor**

Sep 2019 - Present

May 2021

# Menstrual Hygiene Supply Drive | Project Self-Sufficiency | Newton, NJ

• Coordinated a fundraising drive, resulting in the collection of over 6000 menstrual hygiene products

Skills & Interests

**Applications** 

AutoCAD, SOLIDWORKS, Arduino, Adobe Photoshop, Figma, Microsoft Office, Google Suite

**Programming** 

C++, MATLAB, Python, HTML

Interests

Multimedia painter, amateur home cook, live music enthusiast, avid indoor cyclist