# Daria Dobrolinski

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### **EDUCATION**

Bachelor of Science, Computer Science, University of Massachusetts Boston

01/2024 - 05/2027

• Relevant Coursework: Calculus 1 & 2, Fundamentals of Physics 1 & 2, Introduction to Electrical and Computer Engineering, Introduction to Computer Science, Discrete Mathematics.

Bachelor of Science, Pharmaceutical Sciences, University of Rhode Island

09/2023 - 12/2023

• Relevant Coursework: Biology, Chemistry, Calculus 1.

Certificates: Python 3 Course, HTML Course, Intro to GenAI

## WORK EXPERIENCE

Research Assistant 02/2025

University of Massachusetts Boston

Boston, MA

- Refactor and optimize existing MATLAB codebase to enhance readability and efficiency, streamlining the 3D brain reconstruction pipeline that addresses the partial volume problem and improves simulation accuracy in tCS applications.
- Utilize MATLAB and mesh processing tools to generate precise surface and volume models, improving geometric detail in MRI-based reconstructions.
- Implement advanced algorithms for systematically adjusting sulci and gyri widths, reducing data loss and increasing accuracy in biomedical simulations.

# **PROJECTS**

Owner, ASL Recognition with TTS (Github)

04/2025

• Built a real-time ASL recognition system using Python, MediaPipe, a Random Forest classifier, and OpenC featuring custom dataset collection and text-to-speech integration for accessible ASL-to-audio translation.

Owner, Photo Sharing Web App (Website - Github)

03/2025

- Collaborated to develop and design a photo sharing web app for favorite selection using HTML and CSS for frontend and Python for backend.
- Consequently, users can download the selected favorites within the web socket session.

Owner, Anorexia Awareness Website (Website – Github)

01/2025 - 03/2025

- Designed and developed a responsive and visually engaging informative website using HTML, CSS, and JavaScript.
- Implemented an interactive navigation bar, dynamic text effects, charts, and flip-card flashcards to enhance user experience and readability.

Lead, Automatic Irrigation System (Slideshow)

03/2024 - 05/2024

- Developed an Arduino-based irrigation system using soil moisture sensors and water pumps, reducing manual watering efforts by over 50%.
- Engineered and 3D-printed a protective enclosure in Fusion 360, protecting electronics from environmental damage and prolonging system lifespan.

### **SKILLS**

Languages English (Native), Polish (Fluent), Spanish (Advanced)

Programming Languages Python, CSS, HTML, Javascript, MATLAB

Technologies AutoCad, TinkerCAD, Microsoft Office, AutoDesk Fusion 360, Arduino IDE, MacOS

## **AWARDS**

• Seal of Bi-literacy — Spanish & Polish

05/2023

• Dean's List — Fall 2024 Semester

12/2024