

# ELEFThERIA BERES

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## EDUCATION

**Northwestern University**, Evanston, IL  
Bachelor of Science: Computer Science

Expected Graduation Date: Jun 2025  
Cumulative GPA: 3.99

**Northwestern University**, Evanston, IL  
Master of Science: Computer Science

Expected Graduation Date: Jun 2025  
Cumulative GPA: N/A

## TEACHING

**Peer Mentor: DATA\_ENG 200: Foundations of Data Science**  
Northwestern University Department of Computer Science

Jan 2023-Mar 2023  
*Evanston, IL*

- Held three weekly office hours and answer student questions on online course platform.
- Guided student learning of data analysis and visualization and computational problem-solving for data science.

**Peer Mentor: BMD\_ENG 220: Introduction to Biostatistics**  
Northwestern University Department of Biomedical Engineering

Sep 2022-Dec 2022, Sep 2023-  
*Evanston, IL*

- Held two weekly office hours and graded exams and problem sets.
- Facilitated students understanding of statistical methods for biomedical engineering experiments.
- Offered opportunity to return to position for second year due to performance.

## RESEARCH

**Simulating Evolutionary Robotics**  
Northwestern University Xenobot Lab

Feb 2023-  
*Evanston, IL*

- Engineer and program computer simulation for designing and evolving virtual robots.
- Designing first ever simulation of virtual evolving robotics with novel biological inspirations.
- Work on evolving simulated robots to learn a given arbitrary behaviour.

**Family Aware Evolutionary Algorithms**  
Northwestern University Xenobot Lab

Feb 2023-Apr 2023  
*Evanston, IL*

- Design and program evolutionary algorithms for optimizing simulated robot bodies and neural networks.
- Work on balancing diversity and optimization in genetic algorithms by limiting the number of descendants.

**PyFlowBAT: An Open-Source Python Package for Flow Cytometry Batch Analysis**  
Northwestern University Leonard Lab

Mar 2022-  
*Evanston, IL*

- Conceptualize and develop Python package for rapid analysis of flow cytometry data for synthetic biology.
- Collaborate with Ph.D. students and postdoctoral researchers at Northwestern to improve code and usability.
- Present project goals and progress in lab meetings and lead publication writing (paper writing in progress).

## PUBLICATIONS

### Poster Presentations

1. **Beres E**, et al. [PyFlowBAT: An Open-Source Software Package for Performing High-Throughput Batch Analysis of Flow Cytometry Data](#). Poster presented at: EBRC Annual Meeting; 2023 Jun 5-6; Evanston, IL.

## HONORS AND AWARDS

**Summer Undergraduate Research Fellowship**  
Northwestern University Department of Computer Science

Summer 2023  
*Evanston, IL*

**Summer Undergraduate Research Grant**  
Northwestern University Office of Undergraduate Research

Summer 2022, Summer 2023  
*Evanston, IL*

**High Honors**  
Northwestern University McCormick School of Engineering

Fall 2022-Spring 2023  
*Evanston, IL*

## SKILLS AND INTERESTS

**Skills:** Julia, C, Python, F#, Git, Linux  
**Languages:** English (native), Greek (proficient), French (intermediate)  
**Interests & Passions:** Travel, Language learning, Climate and Social Justice, Speculative Fiction, World building