

# Rachel Tjarksen

---

Cleveland, OH • 224 - 500 - 2729 • rst68@case.edu

---

## EDUCATION

### Case Western Reserve University (Cleveland, Ohio)

*Expected Graduation: May 2026*

- BS in Computer Science; BS in Mathematics
- *Dean's High Honors List*
- *University Scholar*

GPA: 3.92/4.00

### Lake Forest High School (Lake Forest, Illinois)

*August 2018 – June 2022*

- High School Diploma
- *Cum Laude*

GPA: 5.38/5.00

## SKILLS AND RELEVANT COURSEWORK

### Skills

- **Programming Languages:** Python; Java; C; C#; HTML5/CSS3; JavaScript; PIC16 Assembly; MATLAB; VHDL
- **Python Libraries:** TensorFlow; Pytorch; Scikitlearn; Keras; Huggingface API; Pandas
- **Javascript Libraries and Frameworks:** Node; React; Angular; Next.js
- **Other Tools:** Linux; Git; Microsoft Office; Web Development; Biliteracy in Spanish

### Coursework

- **Computer Science:** Data Structures and Algorithms; Algorithms; Software Engineering; Operating Systems; Advanced Algorithms; Computer System Architecture; Logic Design and Computer Organization
- **Mathematics:** Calculus I, II, III; Discrete Math; Differential Equations; Linear Algebra; Abstract Algebra; Graph Theory

## PROJECTS

### Sequence Classification with Transformers Research Paper

*May 2023 – Present*

- Conducted comparative study of Transformer based NLP models with classical machine learning techniques.
- Fine tuned and trained a BERT-based model for Sequence Classification of Financial Documents.
- Developed an NLP pipeline for the fine-tuned financial sequence classification model.
- Worked with Hugging Face API (BERT), TensorFlow, Pytorch, Scikit-Learn.

### Web Development

*October 2022 – Present*

- Developed Full-stack web applications using HTML5/CSS3 and JavaScript
- Implemented single-player games like Wordle, Hangman, Nonogram, Minesweeper, Name the Countries, etc.

## WORK EXPERIENCE

### Beach Guard | City of Lake Forest, Illinois

*May 2021 – August 2021; 2022 – August 2022*

- Verified residency and provided customer service
- Assisted patrons with obtaining boating passes

### French Horn Teacher | Private Studio

*May 2020 – August 2022*

- Provided one hour weekly lessons for local middle school students to go over music theory and horn technique

## LINKS

- LinkedIn: <https://www.linkedin.com/in/rachel-tjarksen-26a275259/>
- Github: <https://github.com/rachel-tj>
- Personal Website: <https://racheltjarksen.com/>