

# JACKSON ESHBAUGH

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Bethlehem, PA — 18020, USA

## EDUCATION

### • Lafayette College

*B.S., Computer Science*

◦ GPA: 4.00/4.00

August 2023–May 2027

Easton, PA

### • Lafayette College

*A.B., French Language*

◦ GPA: 4.00/4.00

August 2023–May 2027

Easton, PA

## RESEARCH INTERESTS

### Topics

Machine Learning Interpretability   Computational Linguistics  
Theoretical Foundations of Artificial Intelligence

### Guiding Questions

How do we make neural networks more transparent?  
How do linguistic structure and semantics interact in multilingual NLP models?

## PUBLICATIONS & PREPRINTS

C=CONFERENCE, J=JOURNAL, P=PREPRINT, S=IN SUBMISSION, T=THESIS

- P.1**   [Eshbaugh, J. Fidelity Isn't Accuracy: When Linearly Decodable Functions Fail to Match the Ground Truth.](#) 2025. arXiv:2506.12176.
- S.1**   [Eshbaugh, J., Tiwari, C., and Silveyra, J. A Modular and Multimodal Generative AI Framework for Urban Building Energy Data: Generating Synthetic Homes.](#) 2025. Submitted to *Energy & Buildings*. arXiv:2509.09794.

## POSTERS & PRESENTATIONS

- [1]   [Eshbaugh, J.](#) (Oct 2025). "Synthetic Homes: A Modular and Multimodal Generative AI Framework for Urban Building Energy Data." *CyberAccelerate Poster Session at KINBERCON 2025*, Lancaster, PA. [[poster](#)]
- [2]   [Eshbaugh, J.](#) (Sep 2025). "Synthetic Homes: A Modular and Multimodal Generative AI Framework for Urban Building Energy Data." *Lafayette College Bicentennial Weekend Poster Session*, Easton, PA. [[poster](#)]

## EXPERIENCE

### • Department of Computer Science, Lafayette College [\[G\]](#)

*Teaching Assistant*

◦ Assist professors with teaching duties by helping students during class meetings.

◦ Praised by students as an outstanding teacher who cares and can explain complex things in ways that make sense.

◦ More information on my [teaching page](#).

August 2024 - Present

Easton, PA

### • Academic Resource Hub, Lafayette College [\[G\]](#)

*Mentored Study Group Leader*

◦ Hold two review sessions per week, covering course content.

◦ Produce materials such as worksheets and presentations for sessions.

◦ Praised by students as an outstanding teacher who cares and can explain complex things in ways that make sense.

◦ More information on my [teaching page](#).

August 2024 - Present

Easton, PA

### • Department of Computer Science, Lafayette College [\[G\]](#)

*EXCEL Scholar*

◦ Advisor: Dr. Jorge Silveyra

◦ Conduct meaningful, novel research in machine learning.

◦ Focus on applying ML concepts to the energy sector, employing computational techniques in novel ways.

◦ Run experiments, draw conclusions, and write results.

◦ More information on my [research page](#).


June 2025 - Present

Easton, PA



SKILLS

- **Programming Languages:** Python, Java, JavaScript, C, ML
- **Machine Learning:** PyTorch, TensorFlow, NumPy
- **Other Tools & Technologies:** L<sup>A</sup>T<sub>E</sub>X

HONORS AND AWARDS

- **Marquis Scholarship** May 2023  
*Lafayette College* 
  - Demonstrated intellectual curiosity in addition to superior academic achievement.
  - Recipients display the Marquis’ ideals of global citizenship, scholarly pursuits, leadership, and concern for others.
- **Dean’s List** F23, S24, F24, S25  
*Lafayette College*
  - Achieved a Semester GPA of 3.60 or higher.

VOLUNTEER EXPERIENCE

- **Audio/Visual Specialist** July 2021 - Present  
*Hope Alliance Church* 
  - Design and operate weekly worship slides and sermon visuals
  - Configure live stream and projection systems for services
  - Run slides and broadcast during live events
  - Troubleshoot technical issues quickly and independently
  - Maintain and reset the worship space after services
  - Apply skills in graphic design, live sound, and audiovisual tech
  - Serve faithfully by supporting worship through technical service
- **Audio/Visual Specialist** September 2023 - Present  
*Lafayette DiscipleMakers Christian Fellowship* 
  - Similar service to the above with no live stream component

CERTIFICATIONS

- **Deep Learning Specialization** June 2025

ADDITIONAL INFORMATION

Languages Spoken

English (Native Tongue), French (Fluent; Professional Competency)

Interests

Music (Jazz Vocals, Trombone, Piano, Composition); Photography and Photo Editing; Videography and Video Editing