# **JACKSON ESHBAUGH**

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in jacksoneshbaugh | 🌎 jacksoneshbaugh | 🎔 jacksoneshbaugh

Bethlehem, PA — 18020, USA

#### **EDUCATION**

• Lafayette College August 2023–May 2027

B.S., Computer Science Easton, PA

∘ GPA: 4.00/4.00

• Lafayette College

August 2023–May 2027

A.B., French Language Easton, PA

• GPA: 4.00/4.00

#### 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

S.1 Eshbaugh, J. (2025) Fidelity Isn't Accuracy: When Linearly Decodable Functions Fail to Match the Ground Truth. Submitted to the Mechanistic Interpretability Workshop, NeurIPS 2025. arXiv:2506.12176

#### **EXPERIENCE**

Teaching Assistant

## • Department of Computer Science, Lafayette College [#]

August 2024 - Present

Easton, PA

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

## • Department of Computer Science, Lafayette College [#]

June 2025 - Present

Easton, PA

- 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.

## **SKILLS**

- Programming Languages: Python, Java, JavaScript, C, ML
- Machine Learning: PyTorch, TensorFlow, NumPy
- Other Tools & Technologies: LATEX

## 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

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
- o Apply skills in graphic design, live sound, and audiovisual tech
- Serve faithfully by supporting worship through technical service

#### Audio/Visual Specialist

Lafayette DiscipleMakers Christian Fellowship

• Similar service to the above with no live stream component

#### September 2023 - Present

July 2021 - Present



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## **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