

# JACOB THRASHER

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## EDUCATION

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<b>Ph.D.</b>	<b>West Virginia University</b> , Computer Science	May 2028
<b>BSCS</b>	<b>West Virginia University</b> , Computer Science	Dec 2022
<b>BS</b>	<b>West Virginia University</b> , Mathematics	Dec 2022

Summa Cum Laude, Honors Foundation Scholar

## EXPERIENCE

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**West Virginia University**, Morgantown WV 2023-Present  
**Graduate Research Assistant**, Dr. Prashna Gyawali

- Currently researching multimodal survival analysis with incomplete data to predict Alzheimer’s Disease progression in patients given any combination of MRI scans, clinical notes, and cerebral spinal fluid data.
- Led a team of researchers on a review of multimodal federated learning in the healthcare domain.

**West Virginia University**, Morgantown WV 2022  
**Undergraduate Research Assistant**, Dr. Xin Li

- Developed flexible TikTok scraper with Python and Selenium to create a diverse dataset of drug related content.
- Implemented Vision Transformer models with PyTorch for binary classification.

**Federal Bureau of Investigation**, Chantilly VA 2020  
**Honors Intern**, Technology Innovation Unit

- Designed email parsing and analysis tool to locate suspicious language in target’s email. Programmed in Python utilizing Elasticsearch and Kibana software tools.

## PUBLICATIONS

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Thrasher, J. et al. “Multimodal Federated Learning in Healthcare: a review” (2023)  
(submitted for review at Patterns journal)

Hu, C. et al. Including Jacob Thrasher. “UDPEXplainer: an Interpretable Transformer-based Framework for Urban Physical Disorder Using Street View Imagery” (2023)

## ACTIVITIES

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- Founder/President, Artificial Intelligence WVU** 2021-22
- Led weekly meetings, maintained ongoing club projects, and taught technical workshops for beginners.
  - Brought in guest speakers from notable companies such as Tesla and Noblis to speak with the club members.
- President, Game Developers Club** 2020-21
- Reworked the basic club structure to put more emphasis on real game development and public outreach rather than focusing solely on development theory.
  - Led weekly meetings, educating members on game development skills.

## VOLUNTEER WORK

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- Statler College Ambassador, West Virginia University** 2022-23
- “AI in a Day” high school workshop organizer, Artificial Intelligence WVU** 2022
- Extra Life charity event organizer, Game Developers Club** 2021
- Girl Scouts game development badge workshop, Game Developers Club** 2019