ARTEMIS PANAGOPOULOU

EDUCATION

University of Pennsylvania, Philadelphia, PA Doctor of Philosophy, Computer and Information Science Aug, 2021 - Expected May, 2027 Research Interests: Natural Language Processing, Computer Vision Advisors: Chris Calllison-Burch, Mark Yatskar GPA: 3.97/4. Master of Science in Engineering, Computer and Information Science Jan, 2018 - Aug, 2020 Thesis Title: "Metaphor and Entailment: Looking at Metaphors Through the Lense of Textual Entailment" GPA: 3.77/4. Advisor: Mitch Marcus **Dual Degree in Artificial Intelligence** Aug, 2015 - Aug, 2020 Bachelor of Applied Science (BAS), Computer and Cognitive Science. Thesis Title: "Best-First-Model-Merge: From Theory to Implementation and Application" Advisor: Mitch Marcus Bachelors of Arts (BA) Honors, Cognitive Science Thesis Title: "Optical Flow Estimation from Event Based Cameras Using Deep Spiking Neural Networks" Advisor: Kostas Daniilidis Bachelors of Arts (BA) Honors, Philosophy Thesis Title: "On the suitability of Generative Difference Making for addressing challenges in Artificial Intelligence and Robotics." Advisor: Lisa Miracchi Minor in Mathematics GPA: 3.59/4.

RESEARCH EXPERIENCE

Research Intern

Salesforce, Palo-Alto CA

• Conducting multimodal AI research under the supervision of Dr. Juan Carlos Niebles.

Research Assistant

General Robotics, Automation, and Sensing (GRASP) Lab, University of Pennsylvania

• Worked on estimating optical flow from event based cameras (supervised and unsupervised) using Spiking Neural Networks. (Supervisor: Prof. Kostas Daniilidis)

Research Assistant

Kod*Lab, University of Pennsylvania

• Developed a simulation for physically parameterized soft bellow-shaped robots with multiple degrees of freedom. (Supervisor: Prof. Daniel Koditschek)

Research Assistant

Computer Science Department, University of Pennsylvania

• Applied K-reversible inference on the synthesis of Turkish morphology. (Supervisor: Prof. Mitch Marcus)

May - August, 2023

May, 2019 - May, 2020

sylvania

May, 2019 - Aug, 2019

May, 2018 - Oct, 2018

INDUSTRY EXPERIENCE

Co-founder and Software Developer

Aarogya LLC, Philadelphia, US and Bangalore, India

- Co-founded aarogya.life, an award winning health-tech social enterprise creating a platform to enable low-income patients to access essential medicines while preventing wastage of medicines lying unused in warehouses.
- Received the President's Engagement Prize which is competitively granted to academically excellent and civically engaged Penn seniors to design and undertake fully-funded engagement projects during the first year post grad.

AWARDS AND FUNDING

AWS Research Funding for Fair and Trustworthy AI	May,	2023
Alexa Taskbot Competition Finalist	February,	2022
President's Engagement Prize	May,	2020
Dean's List Donn Engineering Exceptional Service Award	Aug, 2017 - May, Marah	2020
Femi Engineering Exceptional Service Award	march,	2019
TEACHING EXPERIENCE		
Instructor	Sept, 2022 - Dec,	2022
Prison Teaching Initiative at Princeton University, Southwoods State Prison Instructors: Artemis Panagopoulou, Joe Abatte, Uthsav Chitra	n	
Teaching Assistant Course: CIS 530: Natural Language Processing Instructor: Prof. Mark Yatskar	Aug, 2022 - Dec,	2022
Elementary School Instructor Python Coding Curriculum at Kohelet Yeshiva School (4-5 grade) Instructor: Artemis Panagopoulou	Aug, 2021 - May,	2022
Teaching Assistant Course: CIS 700: Interactive Fiction and Text Generation Instructor: Prof. Chris Callison-Burch, Dr. Lara Martin	Jan, 2022 - May,	2022
Teaching Assistant Course: CIS 521: Introduction to Artificial Intelligence Instructor: Prof. Chris Callison-Burch	Aug, 2021 - Dec,	2021
Head Teaching Assistant Course: MCIT 592: Mathematical Foundations of Computer Science Instructor: Prof. Val Tannen	Aug, 2018 - May,	2019
Teaching Assistant Course: CIS 262: Automata, Computability, and Complexity Instructor: Dr. Nima Roohi	Jan, 2018 - May,	2018

LEADERSHIP AND ACTIVITIES

Alexa Taskbot Competition [Finalist]

Aug 2021 - May 2022

- Co-Lead University of Pennsylvania's Team for the Alexa Taskbot Challenge. We implemented a live Alexa Skill that guides users through tasks and recipes.
- Gained experience with Amazon Web Services (AWS) and Alexa Skills Kit (ASK).

Mind, Intelligence, Research, and Analysis (MIRA) Group

• Graduate philosophy research and training group focused on issues in philosophy of mind and language, cognitive science, and epistemology led by Professor Miracchi.

Women in Computer Science (WiCS)

• Acted as a mentor to freshman female computer science majors.

Ivy League Undergraduate Research Symposium

- Led an end-to-end application development project aimed to automate networking and scheduling for the symposium.
- Managed team of 3 developers with bi-weekly Agile sprints to build the Android application.
- Designed and built core backend, UI, and testing infrastructure.

PUBLICATIONS

- Yang, Yue, Artemis Panagopoulou, Shenghao Zhou, Daniel Jin, Chris Callison-Burch, and Mark Yatskar. "Language in a Bottle: Language Model Guided Concept Bottlenecks for Interpretable Image Classification." Accepted to Conference in Computer Vision and Pattern Recognition (2023)
- Yue Yang^{*}, <u>Artemis Panagopoulou^{*}</u>, Marianna Apidianaki, Mark Yatskar and Chris Callison-Burch. "Visualizing the Obvious: A Concreteness-based Ensemble Model for Noun Property Prediction." Findings of EMNLP 2022.
- Panagopoulou, Artemis, Manni Arora Li Zhang Dimitri Cugini, Weiqiu You, Yue Yang Liyang Zhou, Yuxuan Wang Zhaoyi Hou, Alyssa Hwang, Lara Martin, Sherry Shi Chris Callison-Burch, and Mark Yatskar. "QuakerBot: A household dialog system powered by large language models", Alexa Prize TaskBot Challenge Proceedings (2022)
- Yue Yang, Artemis Panagopoulou, Qing Lyu, Li Zhang, Mark Yatskar, Chris Callison-Burch (2021). "Visual Goal-Step Inference using wikiHow." EMNLP 2021 (Oral).
- Yang, Yue, Joongwon Kim, <u>Artemis Panagopoulou</u>, Mark Yatskar, and Chris Callison-Burch. "Induce, edit, retrieve: Language grounded multimodal schema for instructional video retrieval." arXiv preprint arXiv:2111.09276 (2021)
- Chaney, Kenneth, Artemis Panagopoulou, Chankyu Lee, Kaushik Roy, and Kostas Daniilidis. "Self-supervised optical flow with spiking neural networks and event based cameras." In 2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 5892-5899. IEEE, 2021.

May 2018 - Aug 2019

Jan 2019 - May 2019

Jan 2018 - Aug 2018