ARTEMIS PANAGOPOULOU

@ artemisp@seas.upenn.edu \checkmark (267)-752-2378 $^{\circ}$ artemisp.github.io/ in in/apanagop ? scholar/apanagopoulou ? github/artemisp EDUCATION

University of Pennsylvania

Philadelphia, PA

PhD, Computer and Information Science

Aug, 2021 - May, 2025 (expected)

Research Interests: Natural Language Processing, Computer Vision

Advisors: Chris Calllison-Burch, Mark Yatskar

GPA: 3.84/4

Master's of Engineering (MSE), Computer and Information Science Aug, 2018 - May, 2020

Thesis Title: "Metaphor and Entailment: Looking at Metaphors Through the Lense of Textual Entailment"

Advisor: Mitch Marcus GPA: 3.77/4

Bachelors of Science (BAS), Computer and Cognitive Science

Aug, 2015 - May, 2019

Thesis Title: "Best-First-Model-Merge: From Theory to Implementation and Application" Advisor: M. Marcus

Bachelors of Arts (BA), Cognitive Science (Honors)

Aug, 2015 - May, 2019

Thesis Title: "Optical Flow Estimation from Event Based Cameras Using Deep Spiking Neural Networks"

Advisor: Kostas Daniilidis

Bachelors of Arts (BA), Philosophy (Honors)

Aug, 2015 - May, 2019

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

PUBLICATIONS

- Kenneth Chaney, Artemis Panagopoulou, Chankyu Lee, Kaushik Roy, and Kostas Daniilidis (2021). "Self-Supervised Optical Flow with Spiking Neural Networks and Event Based Cameras." (IROS 2021)'
- 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, Artemis Panagopoulou, Mark Yatskar, and Chris Callison-Burch. "Induce, Edit, Retrieve: Language Grounded Multimodal Schema for Instructional Video Retrieval." arXiv preprint arXiv:2111.09276 (2021).

RESEARCH EXPERIENCE

Lead Amazon Alexa Taskbot Competition

August 2021 - May 2022

- Lead University of Pennsylvania's Team for the Alexa Taskbot Challenge. We implemented a live Alexa Skill that guides users through tasks and recipes.
- Employed state of the art models to implement a series of modules with the main ones being: harm classification, question answering, slot filling, and intent detection.
- Lead all of the software engineering efforts and integrations.

Research Assistant

University of Pennsylvania

General Robotics, Automation, and Sensing (GRASP) Lab

May 2019 - May 2020

- Employ dynamic neural fields for unsupervised object tracking on the MVSEC dataset.
- Develop a modular codebase for experiments in spiking neural networks focusing on its integration with event based sensors using a PyTorch based library, Bindsnet.

Kod*Lab

May 2019 - August 2019

- Performed a literature review on the control of soft robots with multiple degrees of freedom.
- Developed a simulation (MATLAB) for a physically parameterized soft bellow-shaped bot with multiple degrees of freedom.

Computer Science Department

May 2018 - October 2018

• Implemented Prof. Dana Angluin's K-reversible inference algorithm and applied it on the synthesis of Turkish morphology.

INDUSTRY EXPERIENCE

Co-founder and Software Developer

Sept 2019 - Aug 2021

Aarogya LLC, Philadelphia, US and Bangalore, India

• Co-founded Aarogya Med Access, a non-profit health-tech social enterprise creating India's first medicine redistribution platform, enabling low-income patients to access essential medicines at extremely affordable prices while preventing wastage of medicines lying unused in warehousing inventories.

• Developed the web application (full stack) in Django and ReactJS

Software Engineering Intern

I-Spirit, Athens, Greece

• Provided technical support to clients, hosted training lessons for new clients, and collected user requirements

June - Sept, 2015

• Updated the product's UI (JavaFX application) to better integrate with Windows 10 design

AWARDS AND FUNDING

Amazon Alexa Taskbot Competition Semifinalist February, 2022 President's Engagement Prize May, 2020 Google exploreCSR (Computer Science Research) November, 2019 - April, 2020 August, 2017 - May, 2020 Dean's List CIS Faculty Appreciation Award March, 2019

TEACHING EXPERIENCE

August 2021 - May 2022 **Elementary School Instructor**

Python Coding Curriculum at Kohelet Yeshiva School (4-5 grade)

Head Teaching Assistant August 2018 - May 2019

MCIT 592: Mathematical Foundations of Computer Science

Instructor: Prof. Val Tannen Teaching Assistant

CIS 700: Interactive Fiction and Text Generation January 2022 - May 2022

Instructor: Prof. Chris Callison-Burch, Dr. Lara Martin Course: CIS 521: Introduction to Artificial Intelligence

August 2021 - December 2021

Instructor: Prof. Chris Callison-Burch

CIS 262: Automata, Computability, and Complexity January 2018 - May 2018

Instructor: Dr. Nima Roohi

SKILLS

Programming Languages: Python, Java, C++, OCaml Scripting Languages: Bash, Javascript, MATLAB, ReactJS Markup Languages: HTML, XML, LaTex, Markdown

Toolkits: PyTorch, tensorflow, sklearn, tensorboard, numpy, pandas, nltk, Android, NodeJS, Amazon Alexa

Databases: MySQL, Firebase, MongoDB DevOp Tools: Git, Docker, Kubernetes, AWS