ARTEMIS PANAGOPOULOU

@ artemisp@seas.upenn.edu (267)-752-2378 artemisp.github.io/ 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: 3.86/4

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 *June - Sept, 2015*

I-Spirit, Athens, Greece

- Provided technical support to clients, hosted training lessons for new clients, and collected user requirements
- 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*
Dean's List *August, 2017 - May, 2020*
CIS Faculty Appreciation Award *March, 2019*

TEACHING EXPERIENCE

Elementary School Instructor *August 2021 - May 2022*
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