


Sofia Eleni Spatharioti

PhD Candidate in Computer Science

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Education

Northeastern University, Boston, MA, USA

(09/2015 - Present)

PhD Student in Computer Science

GPA: **3.8/4**

Advisor: Prof. Seth Cooper

Thesis: *"Cartoscope: Designing Effective Interfaces for Motivating Engagement in Crowdsourced Image Labeling"*

Selected Courses: ➔ Advanced Algorithms, Machine Learning, Human Computer Interaction

Selected Projects: ➔ Design of a web application for homebuyers in Boston (collaboration with the Boston Mayor's Office and the Boston Home Center)

National Technical University of Athens, Athens, Greece

(09/2009 - 06/2015)

Degree in Electrical and Computer Engineering, (5-year study program, MSc equivalent)

Thesis: *"Study, Extraction and Utilization of Relational Models among Virtual Entities in the Social Internet of Things"*

Selected Courses: ➔ Artificial Intelligence, Human-Computer Interaction, Computer Graphics

Selected Projects: ➔ Implementation of a 2D Video Game using Unity Game Engine

➔ Implementation of an online marketplace using Magento and OpenERP

Research Experience

Northeastern University, Boston, MA USA

Research Assistant

(09/2015 - Present)

Advisor: Prof. Seth Cooper

- ➔ Research interests include games, human computer interaction and crowdsourcing.
- ➔ Working on Cartoscope, an open-source research project on crowdsourcing for image labeling.
- ➔ Focus of research project includes the influence of various factors, such as task variety, interface design and collaboration/competition in user experience and engagement.

Microsoft Research, New York City, NY USA

Research Intern, Computational Social Science Group

(05/2019 - 08/2019)

Mentors: Jake Hofman & Dan Goldstein

- ➔ Worked on the Perspectives Engine project about generating helpful analogies for unfamiliar numbers. Part of my work has been deployed to Microsoft PowerPoint.

Microsoft Research, New York City, NY USA

Research Intern, Computational Social Science Group

(05/2018 - 08/2018)

Mentors: Jake Hofman & Dan Goldstein









- ➔ Designed and implemented a crowdsourcing platform and database for generating perspectives for helping people understand unfamiliar numbers encountered in news and other sources.

Publications




- 📖 **Sofia Eleni Spatharioti**, Borna Fatehi, Melanie Smith, Avery Rosenbloom, Josh Aaron Miller, Magy Seif El-Nasr, Sara Wylie, Seth Cooper, (2020) *Tile-o-Scope AR: An Augmented Reality Tabletop Image Labeling Game Toolkit*, In: Proceedings of the 15th International Conference on the Foundations of Digital Games, Bugibba, Malta
- 📖 **Sofia Eleni Spatharioti**, Sara Wylie and Seth Cooper, (2019) *Using Q-Learning for Sequencing Level Difficulties in a Citizen Science Matching Game*, In: Extended Abstracts of the 2019 Annual Symposium on Computer-Human Interaction in Play, Barcelona, Spain
- 📖 **Sofia Eleni Spatharioti**, Sara Wylie and Seth Cooper, (2018) *Does Flight Path Context Matter? Impact on Worker Performance in Crowdsourced Aerial Imagery Analysis*, In: Proceedings of the ISCRAM 2018 Conference, Rochester, NY, USA
- 📖 **Sofia Eleni Spatharioti**, Rebecca Govoni, Jennifer S. Carrera, Sara Wylie and Seth Cooper, (2017) *A Required Work Payment Scheme for Crowdsourced Disaster Response: Worker Performance and Motivations*, In: Proceedings of the ISCRAM 2017 Conference, Albi, France
- 📖 **Sofia Eleni Spatharioti** and Seth Cooper, (2017) *On Variety, Complexity, and Engagement in Crowdsourced Disaster Response Tasks*, In: Proceedings of the ISCRAM 2017 Conference, Albi, France

🏆 **Best Student Paper Award Nomination**

Achievements & Awards

-  Awarded the Dissertation Completion Fellowship from Northeastern University (2020).
-  Elected as the student representative in the KCCS PhD Admissions Committee (2019).
-  Received the KCCS Community Service Award for PhD students (2019).
-  Presented Tile-o-Scope AR at the Citizen Science Association Conference (2019).
-  Nominated for Northeastern University's Outstanding Graduate Student Award in the category: Research: Life Sciences, Physical Sciences and Engineering (2018).
-  Presented Cartosco.pe at a citizen science exhibit at the Cleveland Museum of Natural History (2017).
-  Raised more than 1,000 Euros during a fund raising campaign for "Smile of the Child" non-profit voluntary organization as a member of the High School Student Council (2008).
-  Qualified in the national "Thales" and "Euclid" mathematics competitions (2006).

Presentations

-  **Sofia Eleni Spatharioti**, Sara Wylie and Seth Cooper. (2018) Identifying and Assessing Points of Interest through Crowdsourced Image Analysis. In: Proceedings of the ISCRAM 2018 Conference, Rochester, NY.
-  **Sofia Eleni Spatharioti**, Rebecca Govoni, Jennifer S. Carrera, Sara Wylie and Seth Cooper. (2017) Cartoscope: A New Platform for Citizen Science and Disaster Response. Citizen Science Association Conference, St. Paul, MN.
-  **Sofia Eleni Spatharioti**, Rebecca Govoni, Jennifer Carrera, Sara Wylie and Seth Cooper. (2016) Exploring Required Work and Progress Feedback in Crowdsourced Mapping. AAAI Conference on Human Computation and Crowdsourcing, Austin, TX.

Work Experience

Northeastern University, Boston, MA USA

Teaching Assistant

(Fall 2019)

Instructor: Prof. Magy Seif El-Nasr

Served as a Teaching Assistant for CS7340 (Theory and Methods in Human Computer Interaction), a PhD level core course. Responsible for giving lectures and leading in-class activities, as well as mentoring students towards reading scientific papers, giving presentations about various HCI concepts, and preparing HCI reports based on final projects.

Velti, Athens Greece

Junior Software Engineer

(10/2014 - 03/2015)

Part of the company's Innovation Department, responsible for research on new technologies. Worked on *OPENi*, a European Union ICT Project, which is an open-source, web-based framework for integrating applications with cloud-based services and personal Cloudlets. Responsible for creating an Authentication Server, as well as a fully functional web user interface for *OPENi*.

Technical Skills

Languages:

English: Fluent (CPE)

French: Good (Sorbonne C1)

Greek: Native speaker

Programming Skills:

Python (Experienced)

Javascript (Experienced)





R, MATLAB (Experienced)

CSS,HTML5 (Experienced)

AngularJS (Experienced)

C#, Unity (Experienced)

Interests & Misc.

-  Reviewer for FDG 2017, CitSci 2017, ISCRAM 2018 and CHI PLAY 2019.
-  Organizer of Northeastern University's Khoury PhD Women Group and Khoury PhD Social Hour.
-  Reviewer for Origin, a student-led Tech Hub for entrepreneurship at Northeastern University.
-  Composer and performer for a music band, performed at various music halls.