

Fatma Elsafoury

Glasgow
United Kingdom
☎ 0447397955946
✉ e.fatma.e@gmail.com
📄 <https://efatmae.github.io>

My research interests are in social science computing and AI ethics. In particular, I focus in my research on hate speech detection, social bias, and fairness in natural language processing.

Research Experience

- Sep 2019 **Research associate**, *Knowledge Transfer Partnership (KTP)*, Glasgow, UK.
- Feb 2022 **Responsibilities:** My KTP project was a collaboration between a business partner (Serice systems) and the University of the West of Scotland to build a platform for detecting hate speech in social media. My role as a research associate was to bridge the gap between academia and business by building a tool that meets the business needs based on the latest research in hate speech and machine learning. My tasks included a literature review, getting relevant datasets, developing a machine learning model, and building an online platform to easily use the trained models. The research project was successfully executed with all partners happy with the outcome.

Publications

- 2022 **Fatma Elsafoury**. "Darkness can not drive out darkness: Investigating Bias in Hate Speech and Abuse Detection Models". A full paper **under-review at ACL SRW workshop**.
- 2021 **Fatma Elsafoury**, Stamos Katsigiannis, Steve Wilson, and Naeem Ramzan. "Does BERT Pay Attention To Cyberbullying?". A short paper at **SIGIR 2021**.
- 2021 **Fatma Elsafoury**, Stamos Katsigiannis, Zeeshan Pervez, and Naeem Ramzan. "When the timeline meets the pipeline: A survey on automated cyberbullying detection". **Published in IEEE-ACCESS Journal 2021**.
- 2020 **Fatma Elsafoury**. "Teargas, Water Cannons and Twitter: A case study on detecting protest repression events in Turkey 2013". Published in **Text2Story Workshop at ECIR 2020**.
- 2017 Sarah Birch, and **Fatma Elsafoury**. "Fraud, Plot, or Collective Delusion? Social Media and Perceptions of Electoral Misconduct in the 2014 Scottish Independence Referendum". **Published in Election Law Journal 2017**.

Talks

- July 2021 "Does BERT Pay Attention To Cyberbullying?" at the **SIGIR 2021** conference.
- June 2021 "A true cyberbullying type lies in the eye of the beholder: A comparative study on detecting different types of cyberbullying using different word embeddings" at the 73rd **Language Lunch at the University of Edinburgh**.
- Nov 2020 "Does BERT pay attention to attribution?" at the 72nd **Language Lunch at the University of Edinburgh**.
- Apr 2020 "Teargas, Water Cannons and Twitter: A case study on detecting protest repression events in Turkey 2013" at the **Text2Story Workshop at ECIR 2020**.

Education

- Nov 2019 - **PhD student**, *Computer Science*, The University of the West of Scotland.
- Nov 2023 Working on social biases and their influence on Toxicity and Hate Speech Detection.
- Dec 2019 **MSc by Research**, *Computer Science*, University of Glasgow.
Thesis Title: Detecting Protest Repression Incidents from Tweets.
- Mar 2013 **MSc**, *Geoinformatics*, Twente University, Enschede, Netherlands.
Thesis Title: Monitoring Urban Traffic Status Using Twitter Messages.
- May 2008 **BSc**, *Computer and information sciences*, Helwan University, Cairo, Egypt.
Thesis Title: Personal identification through iris recognition system.

Community Service

- Jan 2022 - a member of the **students' mental health advisory board at the University of the West of Scotland** where we meet monthly to discuss strategies to support the students' mental health.
- Present
- 2021 - Organizer of **Women_in_NLP** Talk Series. My role is to contact and invite female researchers or practitioners in NLP, organize the event, announce it, and host it. Since starting, I have hosted speakers from Allen AI, Google, Microsoft Research, and others.
- Present
- 2021 - Volunteer at the **ACL Year Round Mentorship** which is a network that helps and supports junior researchers in natural language processing (NLP).
- Present
- 2020 - Volunteer at the Scottish Informatics and Computer Science Alliance (**SICSA**) **PhD Peer Support Group** where mental support is provided to PhD students in Scottish universities by fellow PhD students. My duties include co-hosting two sessions a month to allow the students to express themselves in a safe and friendly environment.
- Present
- 2021 Volunteer at **WiML workshop at NeurIPS conference** My role was to help participants in Gather Town virtual environment and to micro-blog about the posters and the talks presented.
- 2018 Volunteer at **Code First Girls** which is an initiative that aims at empowering women through teaching them basic web technologies.
- 2018 Volunteer at the **Programming Workshop For Scientists In Africa (PWS Africa)** which is an initiative to teach programming to students with less opportunities in African countries. The activities included teaching Python to undergraduate students in Ibadan University, Nigeria.

Professional Experience

- Dec 2013 **Software Developer**, *ESRI-NEA*, Cairo, Egypt.
- Aug 2014 **Responsibilities**: Responsible of developing mapping applications using Java script and ArcGIS.
- May 2009 **Software Developer**, *ICON Technologies*, Cairo, Egypt.
- Aug 2011 **Responsibilities**: Responsible of developing web and desktop mapping applications.

Teaching Experience

- April 2019 **Lecturer (Part-time)**, *School of Computing*, Dundee University.
- Aug 2019 **Responsibilities**: I worked with Data Science MSc students where I helped students with their Programming and Machine Learning assignment and marking assignments.
- Sept 2017 **Lab Assistant**, *School of Computing*, Glasgow University.
- Jan 2019 **Responsibilities**: I worked as Python and Alice lab tutor for undergraduate students and Java lab tutor for MSc students. I was involved in exam invigilation and Marking. I also supervised 2 MSc students.

- Oct 2018 **Web development Tutor (Volunteer)**, *Code First Girls*, Glasgow University.
- Dec 2018 **Responsibilities:** I worked as web development tutor for female students and employees in the university of Glasgow. I was responsible for teaching HTML, CSS, JavaScript, Bootstrap, JQuery and GitHub.
- July 2018 **Python Tutor (Volunteer)**, *PWS Africa*, Ibadan University, Nigeria.
- July 2018 **Responsibilities:** I worked as Python tutor for undergraduate and MSc students at the school of Math in Ibadan university. I was responsible for preparing course material, teaching Python (Basics) and Data Science toolkit (Pandas, Numpy and Matplotlib).

Languages

Arabic, *Native Speaker*.

English, *Fluent*.

German, *A2-level(post-Beginner)*.