Alexandros Efstratiou

✉ alexandros.efstratiou.20@ucl.ac.uk   ●   🌐 alefstrat.github.io   ●   in alex-efstra

Profile

I am a PhD Candidate in Computational Social Science in University College London's Computer Science Department with a background in social psychology and behavioral science. My research focuses on the interplay between polarization and misinformation on social media, and has been published in top-tier conferences like ACM WWW, ACM CSCW and AAAI ICWSM.

Education

University College London (UCL), Department of Computer Science   **London, UK**
PhD Computational Social Science (Center for Doctoral Training in Cybersecurity)   *Sept 2020 – Present*
Topic: Propagation of misinformation through polarization on social media. I use methods such as:
▷ Machine learning classification (node classification using Graph Convolutional Networks, etc.)
▷ Community detection in online networks (Louvain algorithm, cluster analysis, etc.)
▷ User/community matching based on similarity metrics (cosine, Mahalanobis distance, etc.)
▷ Natural language processing (text classification, sentiment analysis, topic extraction, named entity recognition, etc.)
▷ Advanced statistical analysis (mixed-effects regression, structural equation modeling, etc.)
▷ Probability estimation and simulation (Markov Chains, binomial regression, etc.)
▷ Surveys, behavioral Randomized Controlled Trials (RCTs), and intervention testing
The project is supervised by Professor Emiliano De Cristofaro and Dr Tristan Caulfield and is funded by the UKRI's EPSRC.

Durham University, Department of Psychology   **Durham, UK**
MSc Behavioural Science, Distinction (79.20)/GPA 4.27   *Sept 2019 – Sept 2020*
Cohort top performer

University of East Anglia (UEA), School of Psychology   **Norwich, UK**
BSc Psychology, First Class Honours (78.85)/GPA 4.25   *Sept 2016 – July 2019*
Cohort top performer

Publications

▷ **Efstratiou, A.** (2024). Deliberate Exposure to Opposing Views and its Association with Behavior and Rewards on Political Communities. *To appear in the ACM Web Conference 2024 (WWW '24).*

▷ **Efstratiou, A.**, Blackburn, J., Caulfield, T., Stringhini, G., Zannettou, S., & De Cristofaro, E. (2023). Non-polar Opposites: Analyzing the Relationship between Echo Chambers and Hostile Intergroup Interactions on Reddit. *In the 17th International AAAI Conference on Web and Social Media (ICWSM '23).*

▷ **Efstratiou, A.**, & De Cristofaro, E. (2022). Adherence to Misinformation on Social Media Through Socio-Cognitive and Group-Based Processes. *Proceedings of the ACM on Human-Computer Interaction (CSCW '22).*

▷ *Hughes, J. P., **Efstratiou, A.**, Komer, S., Baxter, L., Vasiljevic, M., & Leite, A. C. (2022). The Impact of Risk Perceptions and Belief in Conspiracy Theories on COVID-19 Pandemic-Related Behaviours. *PLoS One, 17*(2), e0263716.

*Joint first author.

Pre-prints

▷ **Efstratiou, A.**, Efstratiou, M., Yudhoatmojo, S., Blackburn, J., & De Cristofaro, E., (2023). "Here's Your Evidence": False Consensus in Public Twitter Discussions of COVID-19 Science. *Under submission.*

Invited Research Talks and Conference Talks

- **UCL Information Security Research Group 2024 (planned):** What I see is all that's real: The dynamics of polarization and misinformation on social media platforms (invited research talk).
- **ICWSM 2023:** Non-polar opposites: Analyzing the relationship between echo chambers and hostile intergroup interactions on Reddit (conference talk).
- **GESIS 2023:** Non-polar opposites: An examination of the interplay between echo chambers and hostile intergroup interactions online (invited research talk).
- **CSCW 2022:** Adherence to misinformation on social media through socio-cognitive and group-based processes (conference talk).
- **Academy of Management Annual Meeting 2021:** The leadership oversight bias in justice and hypocrisy evaluations of organisational diversity practices (conference talk).

Teaching

- Teaching assistant: Cybersafety and Online Harms (MSc Course), UCL, Spring 2023-24
- Teaching assistant: People and Security (MSc Course), UCL, Fall 2023-24
- Teaching assistant: Probability, Statistics, & Modeling (BSc Course), UCL, Fall 2023-24
- Teaching assistant: Evidence for Decision-Making (MPA Course), UCL, Fall 2022-23
- Guest lecturer: Evidence for Decision-Making (MPA Course), UCL, Fall 2022-23
- Guest lecturer: Social Cognition (BSc Course), Durham University, Spring 2019-20

Service

- Program Committee: ICWSM 2023-2024
- Reviewer: CHI 2024, CogSci 2023, CSCW 2023-2024, EPJ Data Science, S&P 2023, WWW 2023, NDSS 2023, IMC 2022, ICWSM 2022-2024

Labs & Groups

Security and Privacy Advanced Lab, UCR/UCL — **Riverside, CA/London, UK**
Doctoral Student — *2023 – Present*

Digital Speech Lab, UCL — **London, UK**
Research Associate — *2023 – Present*

National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online — **UK**
Doctoral Researcher — *2020 – Present*

International Data-driven Research for Advanced Modeling and Analysis (iDRAMA) — **Intl.**
Doctoral Researcher — *2020 – Present*

Information Security Research Group (ISec), UCL — **London, UK**
Doctoral Student — *2020 – Present*

Other experience

Fact-Check Cyprus (Part of CUT Social Computing Research Center) — **Limassol, Cyprus (remote)**
Fact-checker; FCC is an official EDMO member. — *2023 – Present*

Ogilvy UK — **London, UK**
Behavioural Science Practice Intern — *July 2019*

UEA Students' Union — **Norwich, UK**
Student Advocacy Assistant — *2017 – 2019*

UEA School of Psychology — **Norwich, UK**
Research Intern — *June 2018 – July 2018*

Awards & Honors

- UCL EPSRC Doctoral Training Program Research Studentship
- Kurt Lewin prize as top performer in the 2019-2020 MSc Behavioural Science cohort, Durham University.
- British Psychological Society Prize for Outstanding Undergraduate Degree Performance as top performer of the BSc Psychology cohort at UEA in all three years of study.
- UEA School of Psychology prize for best undergraduate dissertation (overall) and best undergraduate dissertation (quantitative).

References

Emiliano De Cristofaro Professor, University of California, Riverside
Computer Science & Engineering Department
emilianodc@cs.ucr.edu

Gianluca Stringhini Associate Professor, Boston University
Department of Electrical and Computer Engineering
gian@bu.edu

Jeremy Blackburn Associate Professor, Binghamton University
Department of Computer Science
jblackbu@binghamton.edu