

Patrick Gildersleve

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Summary: *I am an early career computational communications scientist. In my research I use computational, social, and network science approaches towards studying collaborative systems, social media, and news online. I look to answer wider questions of newsworthiness, agenda setting, collective attention and collective memory.*

Employment History

Lecturer in Communications and Artificial Intelligence

Department of Communications, Drama, and Film

University of Exeter

September 2024–Present

- Tenure-track assistant professor equivalent role.

LSE Fellow in Computational Social Science

Department of Methodology

London School of Economics

2021–2024

- Post-doctoral independent research and teaching role, including supervision of MSc dissertations.

Education

DPhil in Information, Communication and the Social Sciences

EPSRC Funded at the Oxford Internet Institute

Supervisors: Prof Taha Yasseri, Prof Renaud Lambiotte

Assessors: Prof Brian Keegan, Dr Jonathan Bright

University of Oxford

2016–2021

DPhil Thesis: *The Wikipedia News Network: Understanding Collective Response to Current Events Through the Internet's Encyclopaedia*

Master of Physics

First Class Honours

University of Oxford

2012–2016

Master's Project: *A Data Deanonimization Approach to Node Re-identification in Labor Flow Networks*

Supervisors: Dr Omar Guerrero, Dr Eduardo Lopez

Publications

depths of wikipedia: Understanding Cross-Platform Online Attention, Content Creation, and Success 2025

P Gildersleve

Working Paper. Link to Extended abstract. Submitting to ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing.

WikiReddit: Tracing Information and Attention Flows Between Online Platforms 2025

P Gildersleve, A Beers, V Ito, A Orozco, F Tripodi

arXiv preprint DOI:0.48550/arXiv.2502.04942. accepted at the International AAAI Conference on Web and Social Media 2025

The News Comment Gap and Algorithmic Agenda Setting in Online Forums 2024

F Böwing, P Gildersleve

arXiv preprint DOI:10.48550/arXiv.2408.07052. Possible venues: Communication Methods and Measures, Journalism Studies, Digital Journalism.

Between News and History: Identifying Networked Topics of Collective Attention on Wikipedia 2023

P Gildersleve, T Yasseri, R Lambiotte

Journal of Computational Social Science, 1-31 DOI:10.1007/s42001-023-00215-w

Collective Memory in the Digital Age 2022

T Yasseri, P Gildersleve, L David

In S. M. O'Mara (Ed.), *Collective memory* (Progress in Brain Research Vol. 274, pp. 203-226). Elsevier.

DOI:10.1016/bs.pbr.2022.07.001

Computational Courtship: Understanding the Evolution of Online Dating through Large-scale Data Analysis 2021

R Dinh, P Gildersleve, C Blex, T Yasseri

Journal of Computational Social Science, 5(1) (pp. 401-426). DOI:10.1007/s42001-021-00132-w

- Modeling Collective Anticipation and Response on Wikipedia** 2021
R Kobayashi, P Gildersleve, T Uno, R Lambiotte
 Proceedings of the International AAAI Conference on Web and Social Media (Vol. 15, pp. 315-326).
 DOI:10.1609/icwsm.v15i1.18063
- Inspiration, Captivation, and Misdirection: Emergent Properties in Networks of Online Navigation** 2018
P Gildersleve, T Yasseri
 International Workshop on Complex Networks (pp. 271-282). Springer, Cham. DOI:10.1007/978-3-319-73198-8_23

Teaching Positions

- CMM2008: Communications Research Methods** University of Exeter
Convenor 2025
- CMM3002/3: Dissertation / Practical Research Project** University of Exeter
Co-convenor with Dr Alexander RE Taylor 2024-25
- CMMM001: Advanced Theory and Concepts** University of Exeter
Lecturer & Seminar Teacher (Convenor Dr woori han) 2024
- CMM2002: Communications in the Workplace** University of Exeter
Lecturer & Seminar Teacher (Convenor Dr Alexander RE Taylor) 2024
- MY459: Quantitative Text Analysis** London School of Economics
Co-convenor with Dr Friedrich Geiecke 2023-24
- MY470: Computer Programming** London School of Economics
Seminar Teacher (Convenor Dr Milena Tsvetkova) 2021-24
- MY461: Social Network Analysis** London School of Economics
Lecturer & Seminar Teacher (Convenors Dr Eleanor Power & Dr Milena Tsvetkova) 2021-24
- MY472: Data for Data Scientists** London School of Economics
Seminar Teacher (Convenor Dr Friedrich Geiecke) 2021-22
- MY452: Applied Regression Analysis** London School of Economics
Seminar Teacher (Convenor Dr Daniele Fanelli) 2021-22
- o Designed and delivered lecture content, class materials, and assessments for these undergraduate (CMM2/3) and postgraduate (CMMM, MY4) level courses. Held weekly seminars, marked and provided feedback for assignments and exams across these five courses.
 - o Conducted course administration through Moodle and GitHub platforms.
- Introduction to Computational Social Science with Python** GESIS Fall Seminar, Mannheim
Co-convenor with Dr Milena Tsvetkova September 2022
 Week-long intense course for graduate students and professionals.
- Teaching Assistant – Online Social Networks** Oxford Internet Institute
Convenor: Dr Bernie Hogan January–March 2018 & 2019
 MSc and PhD level course
- Teaching Assistant – Python for Social Data Science** Oxford Internet Institute
Convenor: Dr Bernie Hogan October–November 2018
 MSc Social Data Science, DPhil Information, Communication and the Social Sciences
- Teaching Assistant – Scripting for Social Scientists (Python)** Oxford Internet Institute
Convenor: Dr Bernie Hogan October–December 2017
 MSc Social Science of the Internet, DPhil Information, Communication and the Social Sciences
- o Assisted in the design of class materials, running of hands-on labs, marking and providing feedback for assignments across these three courses. Conducted course administration through Canvas and GitHub platforms.
- Teaching Assistant – Social Network Analysis** Oxford Summer School in Economic Networks
Convenor: Prof Taha Yasseri June 2017
- o Assisted in the provision of hands-on labs for researchers from a wide range of disciplines & career stages.

Graduate Supervision

What Makes the News: Selection Bias in Collective Action Reporting by Domestic and Dissident Media in China <i>J Chen</i>	MSc Applied Social Data Science 2024
Public Attitudes Towards Foreign Trade During the US-China Trade War: a Reddit Case Study <i>L Fung</i>	MSc Applied Social Data Science 2024
Measuring the comment gap: A machine learning and quantitative text analysis approach to studying news media user comments <i>F Böwing. Best dissertation prize.</i>	MSc Applied Social Data Science 2023
Postpartum Depression: Analyzing Reddit Social Media Behaviour for Deepening Understanding and Early Detection – A Quantitative Text Analysis and Machine Learning Approach <i>V Finsterwald</i>	MSc Applied Social Data Science 2023
Making sense of the Danish ‘Climate Election’ Using Word and Document Embeddings <i>A Harre</i>	MSc Applied Social Data Science 2022
The Ties that Bind: A Social Network Analysis of Cultural Capital in Denmark <i>M Feldman</i>	MSc Applied Social Data Science 2022

Service Responsibilities

Journal & Conference Reviewer – Communications Methods and Measures, Information, Communication and Society, International AAAI Conference on Web and Social Media, EPJ Data Science, Communications Earth & Environment, EPJ B, PLOS ONE	
Lead for Communications and Public Relations <i>Institute for Data Science and Artificial Intelligence</i>	University of Exeter 2025–Present
External Examiner <i>Department of Politics and International Studies</i>	University of Warwick 2024–Present
Director - The Critical AI Centre (CrAIC)	University of Exeter 2024–Present
Employability Representative <i>Department of Communications, Drama, and Film</i>	University of Exeter 2024–Present
Programme Committee – International Conference on Computational Social Science <i>Organizing Committee: Prof Dan Hopkins, Prof Xi Song</i>	Philadelphia July 2024
Programme Committee – Wiki Workshop 2023, 2024 <i>Organization: Wikimedia Foundation</i>	Online May 2023, 2024
Programme Committee – ACM Hypertext <i>Organizing Committee: Dr Alessio Antonini, Dr Francesca Benatti</i>	Rome September 2023
Programme Committee – NetSciX <i>Organizing Committee: Dr Bruno Gonçalves, Prof Leo Ferres, Dr Javier Bustos-Jiménez</i>	Santiago January 2019
Assistant Interviewer <i>BA, MMath in Mathematics, Mathematics & Statistics, Mathematics & Computer Science</i>	Somerville College, University of Oxford December 2018, 2019
Chair <i>Graduate Joint Consultative Committee</i>	Oxford Internet Institute October 2018–2019
Student Representative <i>Research Committee, Graduate Studies Committee</i>	Oxford Internet Institute November 2017–November 2018, February 2018–June 2019

Conference Presentations and Invited Talks

- International Conference on Computational Social Science 2024** **UPenn, Philadelphia**
Oral Presentation *July 2023*
The News Comment Gap and Algorithmic Agenda Setting in Online Forums
- International Conference on Computational Social Science 2023** **University of Copenhagen**
Oral Presentation *July 2023*
depths of wikipedia: Understanding Cross-Platform Online Attention, Content Creation, and Success
- Wiki Workshop 2023** **Online [recorded]**
Oral Presentation *May 2023*
depths of wikipedia: Understanding Cross-Platform Online Attention, Content Creation, and Success
- Wikimedia Research Showcase** **Online [recorded]**
Invited Talk *August 2020*
What matters to us most and why? Studying popularity and attention dynamics via Wikipedia navigation data
- External Seminar Series** **National Institute of Informatics, Tokyo**
Invited Talk *January 2020*
How Does News Become History? Using Wikipedia, Network Science, and Time Series Analysis to Understand the Chronicling of Collective Memory
- NetSciX 2020** **Waseda University, Tokyo**
Oral Presentation *January 2020*
Navigating Historical Events through Wikipedia's Link Structure: A Comparative Analysis of Article Networks in 6 Language Editions
- NetSciX 2020** **Waseda University, Tokyo**
Poster Presentation *January 2020*
Bridging the Floating Gap: How News Events Build Networks of Collective Memory on Wikipedia
- TORCH PastNet Hackathon** **University of Oxford**
Invited Talk *May 2019*
Using Wikipedia and Networks to Study the Recording of History
- Conference on Complex Systems 2018** **Aristotle University of Thessaloniki**
Oral Presentation *September 2018*
The Interplay of Internal and External Traffic on Online Networks in the Prediction of Collective Attention
- Computational Social Science Satellite @ CCS2018** **Aristotle University of Thessaloniki**
Oral Presentation *September 2018*
Computational Romance: What Matters for Personal and Public Perceptions of Attractiveness in Online Dating?
- International Conference on Complex Networks** **Northeastern University, Boston**
Oral Presentation & Publication *March 2018*
Inspiration, Captivation, and Misdirection: Emergent Properties in Networks of Online Navigation
- International Conference on Computational Social Science** **GESIS, Cologne**
Poster Presentation *July 2017*
Order in User Navigational Structures on Wikipedia
- Data Natives** **City University of London**
Oral Presentation *May 2017*
Order in User Navigational Structures on Wikipedia

Research Positions

- Research Assistant – Computational Romance Project** **Oxford Internet Institute**
Principal Investigator: Dr Taha Yasseri *June–September 2018*
- A three month position studying the dating preferences of more than 100,000 users of eHarmony.com over 10 years.
- Intern – Central Laser Facility** **Rutherford Appleton Laboratory, Harwell**
Supervisors: Prof Peter Norreys, Prof David Neely *August–September 2014*
- Thermodynamic modelling for the lifetime optimisation of ultra-thin cryogenic hydrogen targets used in ion acceleration experiments with the PetaWatt VULCAN laser, with the results used to make experimental alterations.

Awards and Grants

ADA Strategic Funding £6000	University of Exeter 2025
Excellence in Education Award £1000 x2	London School of Economics and Political Science 2022, 2023
TORCH PastNet Bursary £200	University of Oxford 2020
Green Templeton College Competitive Conference and Fieldwork Funding £830	University of Oxford 2018, 2020
Oxford Internet Institute Academic Scholarship £1464	University of Oxford 2019
DPhil Studentship £14,500 annually	EPSRC 2016-2020
Worcester College Academic Scholarship	University of Oxford 2015

Media Appearances

Wikimedia Research Showcase <i>Collective Attention Across Wikipedia and the Web</i>	January 2025
Wikimedia Research Showcase <i>Navigation, Networks, News, Wikipedia</i>	August 2020
Oxford Sparks Big Questions Podcast <i>Can data find me a date?</i>	February 2020
BBC News <i>Hot or not: Does rating yourself highly get you more dates?</i>	October 2018

Research Skills

- **Computing:** Comfortable with: Python, R, SQL, HTML, UNIX CLI. Working knowledge of: MATLAB, C, C++. Experienced in visualisation, parallelisation, cloud computing, and integrating generative AI tools.
- **Communication and Presentation skills:** Attended and presented at various conferences and seminars both internal and external to department and university. Built on guidance for personal and professional development from DPhil seminars and subsequent courses. Comfortable performing to crowds through additional teaching and musical stage experience.