Patrick Gildersleve

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Summary: I am a rising 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, as well as collective attention, memory, and action.

Current Position

LSE Fellow in Computational Social Science

London School of Economics

Department of Methodology

September 2021-Present

- Post-doctoral independent research and teaching role, including supervision of MSc dissertations.
- o Primarily focused on refining DPhil thesis work for publications, as well as developing new projects and collaborations.

Education

DPhil in Information, Communication and the Social Sciences

University of Oxford

EPSRC Funded at the Oxford Internet Institute

2016-2021

Supervisors: Prof Taha Yasseri, Prof Renaud Lambiotte Assessors: Prof Brian Keegan, Dr Jonathan Bright

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

Master of Physics University of Oxford

First Class 2012–2016

Master's Project: A Data Deanonymization 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 2023 *P Gildersleve*

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

Measuring the Comment Gap: A Machine Learning and Quantitative Text Analysis Approach to Studying News Media User Comments

2023

F Böwing, P Gildersleve

Working Paper. Possible venues: Communication Methods and Measures, Journalism Studies, Digital Journalism.

Between News and History: Identifying Networked Topics of Collective Attention on Wikipedia 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 *P Gildersleve, T Yasseri*

International Workshop on Complex Networks (pp. 271-282). Springer, Cham. DOI:10.1007/978-3-319-73198-8_23

Conference Presentations and Invited Talks

International Conference on Computational Social Science 2023

Copenhagen

July 2023

Oral Presentation

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

Online [recorded]

Wiki Workshop 2023
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

'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

Oral Presentation & Publication

'Inspiration, Captivation, and Misdirection: Emergent Properties in Networks of Online Navigation'

International Conference on Computational Social Science

GESIS, Cologne

Poster Presentation

July 2017

March 2018

'Order in User Navigational Structures on Wikipedia'

Data Natives City University of London

Oral Presentation
'Order in User Navigational Structures on Wikipedia'

May 2017

Awards and Grants

Excellence in Education Award

London School of Economics and Political Science

£1000 x2

2022, 2023

TORCH PastNet Bursary

University of Oxford

Green Templeton College Competitive Conference and Fieldwork Funding

University of Oxford

£830

2018, 2020

Oxford Internet Institute Academic Scholarship

University of Oxford

£1464

2019

2020

DPhil Studentship

EPSRC

£14,500 annually

2016

Worcester College Academic Scholarship

University of Oxford

2015

Teaching Positions

MY470: Computer Programming

Course Convenor: Dr Milena Tsvetkova

MSc and PhD level course

MY461: Social Network Analysis

Course Convenors: Dr Eleanor Power & Dr Milena Tsvetkova

MSc and PhD level course

MY472: Data for Data Scientists

Course Convenor: Dr Friedrich Geiecke

MSc and PhD level course

MY452: Applied Regression Analysis

Course Convenor: Dr Daniele Fanelli

MSc and PhD level course

o Designed and delivered lecture content, class materials, and assessments. Held weekly seminars, marked and provided feedback for assignments and exams across these four courses.

Conducted course administration through Moodle and GitHub platforms.

Introduction to Computational Social Science with Python

Co-convenor: Dr Milena Tsvetkova

Week-long intense course for graduate students and professionals.

Teaching Assistant – Online Social Networks

Course Convenor: Dr Bernie Hogan

MSc and PhD level course

Teaching Assistant - Python for Social Data Science

Course Convenor: Dr Bernie Hogan

MSc Social Data Science, DPhil Information, Communication and the Social Sciences

Teaching Assistant – Scripting for Social Scientists (Python)

Course Convenor: Dr Bernie Hogan

MSc Social Science of the Internet, DPhil Information, Communication and the Social Sciences

 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

o Assisted in the provision of hands-on labs for researchers from a wide range of disciplines & career stages.

Graduate Supervision

Course Convenor: Prof Taha Yasseri

Measuring the comment gap: A machine learning and quantitative text

analysis approach to studying news media user comments

Flora Böwing. Distinction. Best dissertation prize.

MSc Applied Social Data Science

Postpartum Depression: Analyzing Reddit Social Media Behaviour for Deepening Understanding and Early Detection - A Quantitative Text

Analysis and Machine Learning Approach

Valerie Finsterwald. Distinction

Asmus Harre. Distinction

MSc Applied Social Data Science

MSc Applied Social Data Science

Making sense of the Danish 'Climate Election' using word and

document embeddings

The Ties that Bind: A social network analysis of cultural capital in

Denmark

MSc Applied Social Data Science Miriam Feldman. Merit 2022

London School of Economics

London School of Economics

2021-23

2021-23

London School of Economics

2021-22

London School of Economics

2021-22

GESIS Fall Seminar, Mannheim

September 2022

Oxford Internet Institute

January-March 2018 & 2019

Oxford Internet Institute

October-November 2018

Oxford Internet Institute

October-December 2017

2023

2022

Research Positions

Research Assistant - Computational Romance Project

Oxford Internet Institute

Principal Investigator: Dr Taha Yasseri

June-September 2018

o 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.

Service Responsibilities

Journal & Conference Reviewer – International AAAI Conference on Web and Social Media, EPJ Data Science, EPJ B, PLOS ONE

Programme Committee - ACM Hypertext

Rome

Organizing Committee: Dr Alessio Antonini, Dr Francesca Benatti

September 2023

Programme Committee - Wiki Workshop 2023

Online

Organization: Wikimedia Foundation

May 2023

Programme Committee – NetSciXOrganizing Committee: Dr Bruno Gonçalves, Prof Leo Ferres, Dr Javier Bustos-Jiménez

Santiago January 2019

Assistant Interviewer

Somerville College, University of Oxford

BA, MMath in Mathematics, Mathematics & Statistics, Mathematics & Computer Science December 2018, 2019

o I assisted in developing interview questions, interviewing undergraduate applicants, note-taking in interviews, and assessing candidates based on interview performance, application quality, and sociodemographic factors.

Chair Oxford Internet Institute

Graduate Joint Consultative Committee

October 2018-2019

Elected to act as a prime point of communication between staff and students for all education related matters.

Student Representative

Oxford Internet Institute

Research Committee, Graduate Studies Committee

November 2017–November 2018, February 2018–June 2019

- o Representing student matters in shaping the department's research strategy, leading up to the UK's REF 2021.
- o Relaying results of key discussions at GJCC meetings to the departmental Graduate Studies Committee.

Media Appearances

Oxford Sparks Big Questions Podcast

Can data find me a date?

February 2020

BBC News

Hot or not: Does rating yourself highly get you more dates?

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.
- o **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.