## Caio Mello

🔀 caiomellodh@gmail.com 🛛 🗹 caiocmello

https://orcid.org/0000-0001-7492-7237

### Education

### School of Advanced Study, University of London

PhD. Digital Humanities Supervisor: Prof. Jane Winters and Martin Steer Thesis: A CONCEPTUALISATION OF OLYMPIC LEGACY DISCOURSE IN BRITISH AND BRAZILIAN MEDIA COVERAGE OF THE LONDON 2012 AND RIO 2016 SUMMER OLYMPIC GAMES Funding: Marie Curie Fellow, European Union's Horizon 2020 research and innovation programme

### Universidade Federal de Pernambuco

M.A. Communication Mar. 2016 - Feb. 2018 Supervisor: Prof. Carolina Figueiredo Thesis: I AM GOING! FACEBOOK USERS' ATTENDANCE TO EVENTS AS A PERFORMATIVE POLITICAL ACT IN THE OCCUPY ESTELITA MOVEMENT. Funding: Foundation for the Support of Science and Technology in Pernambuco (FACEPE)

### Universidade Federal de Pernambuco

B.A. Journalism Funding: Brazilian National Council for Scientific and Technological Development (CNPg)

### Languages

Portuguese – Native English – Full proficiency **Spanish** – Elementary proficiency German - Elementary proficiency

### **Computer skills**

Python; Machine learning (Representation learning); Statistics (Statsmodel, Excel, Jamovi); Networks & Data Visualisation (Gephi, Plotly, Matplotlib, Seaborn, RAWGraphs); Multilingual NLP; 3D modelling, Basic knowledge of R, HTML, CSS, TEI.

### **Technical training**

2023 - Cambridge Digital Humanities Research Software Engineering Summer School: Containers and serverless for DH projects, 3D Data - Structure from Motion, Teaching Computational Methods to Humanities Researchers, Collaborating on Code - Git flow framework, Testing and Continuous Integration - University of Cambridge (28hrs)

2022 - Summer Institute of Computational Social Science: Using digital trace data to answer social science questions, APIs to collect data, Amazon Mechanical Turk to run digitally powered surveys, Combining surveys and Big Data – RWTH Aachen University & University of Graz (60hrs)

2022 – Applied Data Analysis – University of Oxford Digital Humanities Summer School (40hrs)

2022 - Basic Statistics - Royal Statistical Society (12hrs)

2022 - Information Design and Data Visualisation - University of Arts London (9hrs)

London, UK Aug. 2019 - Jun. 2024

Recife, BR Mar. 2012 - Dec. 2015

Recife, BR

**2021** – **2**<sup>nd</sup> **CLEOPATRA learning week**: Data Storytelling for Data Science, Semantic data visualization, Introduction to Visual Analytics – University of Hannover (40hrs)

**2019** - 1<sup>st</sup> **CLEOPATRA learning week**: Multilingual Natural Language Processing, Introduction to Machine Learning and Deep Learning, Knowledge graphs, Social media data analysis, Good Artificial Intelligence: Explainable and without Bias – University of Zagreb (40hrs)

#### Soft skills

2023 – Agile Research: demystifying buzzwords – Center for Advanced Internet Studies (6hrs)

**2021 – Applying for Research Funding –** School of Advanced Study/University of London (1hr)

2021 – Publishing and Impact Workshop – University of Reading (2hrs)

2020 - Delivering your presentation remotely - Principiae/Serrapilheira (2hrs)

2019 – Pronunciation and Public Speaking for Academics – University College London (18hrs)

2019 – Effectively Communicating your research online – The Foundling Museum (4hrs)

### Experience \_\_\_\_\_

<b>Editor</b> Programming Historian in English Publishing editor working on the selection of lessons covering digital methods for the humanities and social sciences.	Remote Jan.2024 - Present
<b>Research Fellow</b> Center of Advanced Internet Studies <i>Research on sentiment analysis applied to news articles:</i> <i>potentials and limitations</i>	Bochum, DE Apr. 2023 – Sep. 2023
<b>Early-Stage Researcher in Digital Humanities</b> School of Advanced Study, University of London Research on digital methods, open-access, web archiving, multilingual data analysis, critical data practices; delivery of workshops on DH; events organisation; public engagement; science communication	London, UK Aug. 2019 – Mar. 2023
<b>Visiting Researcher – Secondment</b> VICO Research & Consulting Research on consumers' profiles and interactions online using Natural Language Processing and qualitative methods	London, UK Nov. 2021 – Dec. 2021
<b>Visiting Researcher – Secondment</b> UK Web Archive, British Library Research on techniques to explore texts as data in Web Archives Web scraping, data visualisation, text analysis, digital cultural heritage	London, UK Dec. 2019 – Feb. 2020
<b>Research Fellow</b> Center of Advanced Internet Studies <i>Research the performative use of social media</i> <i>by #Occupy activists</i>	Bochum, DE Dec. 2018 – Feb. 2019
Broadcast Liaison Officer Olympic Broadcasting Services - OBS	Rio de Janeiro, BR Jul. 2016 – Aug. 2016

Managing operations of live interview areas in Athletics and Football venues during the Rio 2016 Olympic Games

### **Research Student Assistant**

Universidade Federal de Pernambuco - UFPE Collaborating with research on TV Journalism and discourse analysis

### **Venue Information Assistant**

Host Broadcast Services - HBS Liaising with the Organising Committee Media Department to provide journalists with up-to-date information during the FIFA 2014 World Cup

### Research projects \_

**Center for Advanced Internet Studies (2023)** | Unveiling the potentials and limitations of Sentiment analysis algorithms to study news media

This project focused on the challenges of working with Sentiment Analysis (SA) applied to news articles in a multilingual corpus. The main results are recommendations for researchers in the Humanities on how to interpret the outputs of SA when analysing news.

### Marie Skłodowska-Curie ITN (2019 - 2023) | CLEOPATRA: Cross-lingual Event-centric Open Analytics Research Academy

This project facilitated advanced cross-lingual processing of textual and visual information related to key contemporary events at scale and developed innovative methods for efficient and intuitive user access to and interaction with multilingual information. As a project ESR (Early-stage researcher) I was responsible for carrying out collaborative and interdisciplinary research in the use of NLP to respond to questions of the Humanities and Social Sciences; planning, executing and conducting user evaluations of demonstrators (apps); producing reports and deliverables; and promoting integration among work packages.

# **Center for Advanced Internet Studies (2018)** | *Occupying Facebook: social movements, performativity and engagement*

This project investigated how the perception of a political self-identity is affected by the usage of Social Networks by Occupy activists. In-depth interviews and questionnaires were used to study how activists interpret their behaviour on social media and how it impacts social mobilization on the streets.

### Publications \_

**Book Chapter** | Mello, C. (2023). Data scarcity and methodological limitations in multilingual analysis of news articles published in Brazil. In *Multilingual Digital Humanities*: Routledge series Digital Research in the Arts and Humanities.

Paper | Mello, C. Cheema, G. & Takkar, G. (2022). Combining sentiment analysis classifiers to explore multilingual news articles covering London 2012 and Rio 2016 Olympics. In *International Journal of Digital Humanities*. https://doi.org/10.1007/s42803-022-00052-9

Paper | Sittar, A.; Major, D.; Mello, C. (2022) Political and Economic Patterns in COVID-19 News: From Lockdown to Vaccination. In *IEEE Access*, vol. 10, pp. 40036-40050, 2022, doi: 10.1109/ACCESS.2022.3164692.

Paper | Gottschalk, S. Mello, C. et al. (2021). OEKG: The Open Event Knowledge Graph. 2nd International Workshop on Cross-lingual Event-centric Open Analytics. (Awarded best paper at the conference)

May 2015 - Dec. 2015

Recife, BR

Recife, BR Jun. 2014 – Jul. 2014 Paper | Figueiredo, C., & Mello, C. (2020). Facebook Event as a platform to promote engagement in social movements: Theory of performativity applied to social networks. In *Culturas Midiáticas*, v. 13, n. 1, p. 54–69, 2020. doi: 10.22478/ufpb.1983-5930.2020v13n1.51507

**Book Chapter** | Mello, Caio. (2018) Performativity and Conflicts between the occupation of real and virtual spaces: analyzing the Facebook Events platform. In *Compós 2018: Movement, Space and Alterity*. UFBA.

### Tools, code and datasets

- [Tool] SentiDiário: A tool for visualising sentiment in the news archived by the Portuguese Web Archive https://huggingface.co/spaces/sentdiario/Sentdiario
- [Dataset] Sentiment Analysis annotation of News Articles covering the Olympic legacy of Rio 2016 and London 2012 <u>https://doi.org/10.5281/zenodo.6323964.</u>
- [Code] Is sentiment in the news becoming more negative over time? https://github.com/caiocmello/news-mood
- [Dataset]. News headlines of BBC articles published by @BBCBreaking Twitter account https://doi.org/10.5281/zenodo.6927800
- [Tool] *TIME: Temporal Discourse Analysis applied to Media Articles* <u>https://github.com/cleopatra-itn/TIME</u>

### Project's reports and blog posts

- London's Olympic Legacy: Local, National and International Aspirations, UK Web Archive <u>Blog</u> British Library
- #OccupyEstelita: The Emergence of Identity as Part of Political Performativity in the Use of Facebook
   Events by Social Movements, Center for Advanced Internet Studies CAIS Fellowship Report
- Exploring media events with Shine, UK Web Archive Blog British Library
- A study of Black Lives Matter protests on TikTok using the digital snowball method, Digital Methods Summer School Report - Universiteit van Amsterdam
- Boris Johnson, fertility and the royal baby: how far does the concept of Olympic Legacy go?, UK Web Archive <u>Blog</u> British Library
- What is left behind? Exploring the Olympic Games legacies through the UK Web Archive, UK Web Archive <u>Blog</u> British Library

#### **Peer-review & Translations**

- Reviewer (Conference): Born-Digital Collections, Archives and Memory | 2024
- Translator (Museum): Instituto Ricardo Brennand (Collection's labels) | 2024
- Translator (Journal): Programming Historian | 2021
- Reviewer (Journal): Programming Historian | 2021 2022
- Reviewer (Journal): Informatica International Journal of Computing and Informatics | 2021

### Public Engagement & Events organisation \_\_\_\_

<b>On the Margins: Hypertext, Electronic Literature, Digital Humanities</b> Member of Organising Committee   School of Advanced Study <i>About: Conference on how Hypertext has shaped research and creative practices.</i>	London, UK Dec. 2022
<b>Documenting the Olympics and the Paralympics</b> Member of Organising Committee   British Library in collaboration with the British Society of Sports History (BSSH), the International Centre for Sports History and Culture at De Montfort University (ICSHC) and the School of Advanced Study (SAS). <i>About: Conference for researchers interested in studying the Olympic Games through archives.</i>	London, UK Jul. 2021
<b>Digital Humanities Research Hub Seminar</b> Member of Organising Committee, School of Advanced Study <i>About: Conference to promote collaborative research in Digital Humanities.</i>	London, UK Jun. 2021
<b>Digital Access, Inclusion and the Humanities</b> Member of Organising Committee, School of Advanced Study <i>About: Conference exploring the value of digital tools and platforms in enabling,</i> <i>promoting and developing the humanities at a time of crisis.</i>	London, UK Feb. 2021
<b>Our Mutual Friend the Machine, Being Human Festival (Public engagement)</b> Member of Organising Committee, School of Advanced Study <i>About: Event at Waterstones bookshop on computing-generated poetry.</i>	London, UK Nov. 2019

### Presentations & Invited talks

Interpreting the results of Sentiment Analysis algorithms to categorise emotions discursively expressed in news articles, Center for Advanced Internet Studies Bochum, CAIS Colloquium | May 2023

Reframing Failure: It's Complicated - Collaborations and Partnerships London, Digital Humanities Research Hub Seminar | Mar. 2023

Before, During and After: A Bilingual Temporal Sentiment Analysis of the Media Coverage of Rio and London Olympic Legacies Sheffield, Digital Humanities Congress | Sep. 2022

*PyArchWeb: A tool for easily accessing and enriching the content of web archives* **London, WARCnet Meeting | Senate House | Apr. 2022** 

The Problem of missing data: Critical practices in Humanities Research Online, Stanford University, Center for Spatial and Textual Analysis (CESTA) | Apr. 2022

Activists, the government and the media: the discursive dispute for the legacy of the Olympics **Online, Digital Humanities Research Hub | Oct. 2021** 

Local, national and international aspiration: framing London's Olympics legacy by combining multiple sources in SHINE

London, Documenting the Olympics and the Paralympics | British Library and British Society of Sports History | Jul. 2021

The archived Olympics: exploring the legacy of London 2012 London, Annual Web Archive Conference | British Library | Nov. 2020 Tracking and analysing media events through Web Archives Ireland/Online, Engaging with Web Archives Conference | Maynooth University | Set. 2020

Nationalism, internationalism and sporting identity: the London and Rio Olympics/Paralympics Hannover, CLEOPATRA meeting | TIB/Leibniz Universität Hannover | Feb. 2020

Activism and Self-Identity in #Occupy Movements Bochum, CAIS Colloquium | Center of Advanced Internet Studies | Dec. 2018

#### Awards

2022 SAS Postgraduate Research Seminar Series Awards Best presentation 2021 - 2022
2016 XXIII National Expocom Awards 2016 Production in TV Journalism
2016 XXIII Northeastern Expocom Awards 2016 Production in TV Journalism
2015 XXII Northeastern Expocom Awards 2015 Experimental production in TV Journalism
2015 XXII Northeastern Expocom Awards 2015 Book/Production in Narrative Journalism

**Scholarships & Funding** 

2023 Center for Advanced Internet Studies (CAIS) 6-month Research Fellowship
2019 Marie Skłodowska-Curie Innovative Training Networks 2020 PhD Scholarship
2018 Center for Advanced Internet Studies (CAIS) 3-month Research Fellowship
2016 Pernambuco Research Foundation (FACEPE) M.A Scholarship
2015 Institutional Scientific Initiation Scholarship Programme (PIBIC) B.A Scholarship
2013 Pernambuco's Press Observatory Extension Programme B.A Scholarship

## Teaching \_\_\_\_\_

**Born Digital data** | *School of Advanced Study Digital Humanities Training Platform (2023)* I worked as a freelance consultant, developing the strand 'Born Digital data' to the new platform, RESHAPED, for DH teaching at the University of London. Work consisted of preparing material (text, video, images) covering digital methods, critical data analysis and ethics of data use.

**Introduction to Sentiment Analysis Workshop** | *Center for Advanced Internet Studies (2023)* Workshop developed as part of my fellowship at CAIS. Participants took part in exercises to explore one of the most popular Natural Language Processing techniques in the field of Digital Humanities. We covered the history of Sentiment Analysis, how it has changed over time, how it can be applied to research in the humanities & social sciences and more importantly, what its potentials as well as its limitations are.

## **Concepts of Digital Humanities** | School of Advanced Study Research Training, Digital Humanities Research Hub (2021 to 2023)

Training offered to postgraduate students and early-career researchers in two parts divided into asynchronous theoretical material followed by a meeting with hands-on group exercises covering textual-based digital methods. Work included preparation of online material, reviewing, support to students, preparation of feedback surveys and development of exercises. Training delivered with Dr. Christopher Ohge.

# **Psychology of Communication** | Federal University of Pernambuco B.A Radio, TV and Internet, Department of Communication (2016)

Teaching assistant of Professor Patricia Horta. Work included preparation and delivery of lectures, exercises, assignments, tests and group projects. Final student projects consisted of producing a documentary on mental health support provided by the Brazilian state.

### **Teaching Training**

**2023** – **Teaching Computational Methods to Humanities Researchers** – Cambridge Digital Humanities & Research Software Engineering Summer School (2hrs)

- **2022** Marking and Feedback School of Advanced Study Research Training (1h30)
- 2021 Training the teacher: giving your first Digital History workshop The Programming Historian (1h30)
- 2020 Teaching Skills for the PhD Student School of Advanced Study Research Training (2hrs)