

Dr. Ana Valdivia

Research Associate in Critical Artificial Intelligence Studies

King's College London

Computational social science, artificial intelligence, natural language processing.

Machine learning: fairness, transparency, and accountability.

Transdisciplinary projects.

✉ ana.valdivia@kcl.ac.uk 🌐 www.avaldivia.com 🐙 github.com/anavaldi 🐦 [@ana_valdi](https://twitter.com/ana_valdi)

Employment

- 02/09/2020 Postdoctoral Researcher (London, UK)
currently *King's College University* – Security Flows (ERC Consolidator Grant)
- 28/10/2019 Data Scientist (London, UK)
31/08/2020 *Trilateral Research* – Data Science and Technology Department
- 21/05/2018 Data Scientist (Chicago, USA)
17/08/2018 *University of Chicago* – Data Science for Social Good Fellowship
- 01/01/2017 Associate Lecturer (Barcelona, Spain)
currently *Open University of Catalonia* – MsC in Data Science (Online)
- 01/09/2016 Research Assistant (Granada, Spain)
01/02/2019 *University of Granada* – Department of Computer Science and Artificial Intelligence
- 01/09/2014 Research Assistant (Barcelona, Spain)
31/08/2015 *IESE Business School* – Production, Technology & Operation Management Department

Education

- 01/04/2019 Visiting Scholar (Barcelona, Spain)
27/04/2019 *Universitat Pompeu Fabra* – Department of Artificial Intelligence and Machine Learning
- 01/09/2016 PhD Summa Cum Laude (Granada, Spain)
31/12/2018 *Universidad de Granada* – Department of Computer Science and Artificial Intelligence
- 01/09/2015 MsC in Data Science and Computer Engineering (Granada, Spain)
31/09/2016 *Universidad de Granada*
- 01/09/2008 BsC in Mathematics (Barcelona, Spain)
14/07/2014 *Universitat Politècnica de Catalunya*

Publications

- [1] Valdivia Ana, et al. (2021). "[How fair can we go? Assessing the boundaries of fairness in decision tree algorithms](#)". [Q1, 10 cites](#).
- [2] Schweinsberg, M., et al. (2021). "[Same data, different conclusions: Radical dispersion in empirical results when independent analysts operationalize and test the same hypothesis](#)". *Organizational Behavior and Human Decision Processes*. [Q1, 7 cites](#).
- [3] Valdivia, A., et al. (2020). [What do people think about this monument? Understanding negative reviews via deep learning, clustering and descriptive rules](#). *Journal of Ambient Intelligence and Humanized Computing*, 11(1), 39-52. [Q1, 18 cites](#).
- [4] López, Miguel et al. (2019). "[E2SAM: Evolutionary ensemble of sentiment analysis methods for domain adaptation](#)". In: *Information Sciences* 480, pp. 273–286. [Q1, 23 cites](#).
- [5] Valdivia, Ana et al. (2019). "[Inconsistencies on TripAdvisor reviews: A unified index between users and Sentiment Analysis Methods](#)". In: *Neurocomputing* 353, pp. 3–16. [Q1, 37 cites](#).
- [6] Zuheros, Cristina et al. (2019). "[Deep recurrent neural network for geographical entities disambiguation on social media data](#)". In: *Knowledge Based Systems*. [Q1, 8 cites](#).
- [7] Martínez-de-Albéniz, Víctor and Valdivia, Ana. (2019). [Measuring and exploiting the impact of exhibition scheduling on museum attendance](#). *Manufacturing & Service Operations Management*, 21(4), 761-779. [Q1, 7 cites](#).
- [8] Valdivia, Ana, et al. (2018). "[Consensus vote models for detecting and filtering neutrality in sentiment analysis](#)". In: *Information Fusion* 44, pp. 126–135. [Q1, 31 cites](#).
- [9] Valdivia, Ana et al. (2017). "[Sentiment analysis in tripadvisor](#)". In: *IEEE Intelligent Systems* 32(4), pp. 72–77. [Q2, 124 cites](#).

Working or submitted publications

- [1] Valdivia Ana, et al. (2022). "'There is an elephant in the room': A critique towards the use of fairness in biometrics". *Submitted to ACM Fairness, Accountability and Transparency Conference*.
- [2] Valdivia Ana, et al. (2022). "'Assessing gender violence risk assessment tools from a technical, social and legal perspective". *Submitted to AAAI / ACM Artificial, Ethics and Society*.
- [3] Valdivia Ana, et al. (2021). "Neither opaque nor transparent: Investigating datafication and accountability at EU's borders". *Submitted to Big Data & Society*.
- [4] Tazzioli Martina and Valdivia, Ana. (2021). "Invisibilise, foster and recraft racialised borders through artificial intelligence. Challenging the repressive hypothesis". *Submitted to Big Data & Society*.
- [5] Valdivia Ana, et al. (2021). "Governance in online citizen participation: Auditing the urban planning process in Decidim Barcelona". *Working paper*.

Conferences

- [1] Valdivia, Ana (2021). "Algorithmic oppression at the EU borders: how biometric systems are jeopardising fundamental migrants' rights?". In: *Critical Borders: Radical (Re)visions of AI*. Leverhulme Center for the Future of Intelligence and University of Cambridge.
- [2] Valdivia, Ana, et al. (2021). "Auditing the urban planning process in Decidim Barcelona". In: *Data Justice Conference*. Data Justice Lab.
- [3] Valdivia Ana, et al. (2017). "Neutrality in the sentiment analysis problem based on fuzzy majority". In: *2017 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. IEEE, pp. 1–6.
- [4] Valdivia, Ana, et al. (2017). "Sentiment Analysis on TripAdvisor: Are There Inconsistencies in User Reviews?" In: *International Conference on Hybrid Artificial Intelligence Systems*. Springer, pp. 15–25.

Grants and Funding

- 2021 Antiracist resistance and Artificial Intelligence. *The Open Society*. 100,000 USD.
- 2021 Biometrics and Fairness + Privatisation of borders. *King's Undergraduate Research Fellowships*. 3,000 GBP.
- 2020 COronavirus Vulnerabilities and INFOrmation dynamics Research and Modelling (COVINFORM). *H2020 Programme*. 4,941,678.5 EUR.
- 2018 Data Science for Social Good Fellowship. *University of Chicago*. 10,000 USD.

Teaching experience

- 2021 Convey and design module to PhD students on 'Digital Methods for Analysing Texts' – London Interdisciplinary Social Science Doctoral Training Partnership (LISS-DTP).
- 2021 Guest Lecturer MA 'Mobility, Technology, Justice' – Goldsmiths University of London.
- 2021 Guest Lecturer BA 'Critical Security Studies' – King's College London.
- 2021 Guest Lecturer BA 'Human Rights and Global Injustice' – University of Westminster.
- 2021 Convey and design MA module on 'Explainability and Machine Learning' – International University of Andalusia.

Administrative roles

- 2021 Recruitment panel to appoint a Researcher at King's College London.
- 2021 Nomination by the Online, Professional & Executive Education Committee at King's College London to design interdisciplinary business models.
- 2020 Public procurement process at King's College London to design a website for SECURITY FLOWS' project: www.securityflows.org

Pastoral care

- 2021 Mentor two BA students on their future career plans at King's College London.
- 2017 Supervise more than 10 MSc students at Open University of Catalonia.
currently

Media coverage and public engagement

- currently Blog *The Jevons Paradox*. Posts about science and power. [Link](#).
- currently Podcast *PostApocalipsisNau*. Critical approach to technology, power and society. [Link](#).
- 19/09/2021 El Pais “Biometric data, the new weapon of repression threatening Afghans”. [Link](#).
- 14/05/2021 Twitch TV Facial recognition: risks or benefits? Maldita. [Link](#).
- 24/03/2021 El Salto Diario “70 voices in academia call for moratorium on facial recognition systems” [Link](#)
- 04/12/2020 El Salto Diario “On the myth of artificial intelligence and the future that is not to come”. [Link](#).
- 26/11/2019 Live interview – Carne Cruda “The power of data”. [Link](#).
- 07/11/2019 Talk “The Ethics of Artificial Intelligence: Why do we need interdisciplinary teams?”. Invited by: *Open Society*. [Link](#).

Recent invited talks and seminars

- 11/11/2021 GeoMedia seminar on ‘Datafication and Migration invited by Karlstad University.
- 24/10/2021 ‘Digitalisation and privatisation of EU’s borders’ invited by [Amnesty International](#).
- 28/09/2021 Online workshop on ‘Frontex and EU borders’ invited by The Open Society. [Link](#).
- 06/09/2021 ‘How is artificial intelligence jeopardising LGTBIQ+ rights?’ invited by the University of Granada.
- 30/06/2021 National Strategy on Technology and Global Order invited by [Ministry of Foreign Affairs](#) (Spanish Government).
- 21/03/2021 Webinar on ‘Artificial Intelligence at the border’ invited by Durham University (ESRC Financial Inclusion and Digital Connectivity in Refugee Governance)

Organised events

- 05/05/2022 Workshop on “Recrafting “omnes et singulatim”: collective and individual subjectivities in algorithmic governmentality”. Organisers: Daniele Lorenzini (Warwick University), Martina Tazzioli (Goldsmiths University), Ana Valdivia (King’s College London).
- 06/07/2021 ‘Workshop on “Datafication technologies, counter-power, and resistance at the EU Borders” organised by Security Flows. [Link](#).
- 23/03/2019 Data, ethics and social good workshop. Organised by Ana Valdivia and Victor Vicente. [Link](#).
- 2016-2018 Data Beers GRX. Organised by Ana Valdivia and Manuel Parra. [Link](#).
- 16/11/2017 IX Conference of R users in Spain. [Link](#).

Prizes and Awards

- 2017 The most innovative paper presented at HAIS 2017 titled “Sentiment Analysis on TripAdvisor: Are There Inconsistencies in User Reviews?”
- 2017 UniversityHack CAJAMAR 2017 - Special Mention. The jury rewarded our data visualizations on the proposed problem.
- 2016 Datathon CETAQUA 2016 – Winner Team. Top position at the first datathon organized by the University of Granada, CETAQUA, and Emasagra.