

Matías Piqueras

CONTACT INFORMATION	Department of Information Technology Uppsala University	<i>E-mail:</i> matias.piqueras@it.uu.se
RESEARCH INTERESTS	Computational social science, political communication, computer vision, probabilistic machine learning, text-as-data, causal inference	
EDUCATION	Uppsala University Ph.D. Computer Science, 2023 - 2028 (expected) <ul style="list-style-type: none">• Dissertation topic: “Analysis of online visual political communication”• Advisors: Matteo Magnani, Alexandra Segerberg, Nataša Sladoje and Victoria Yantseva• Funded by CHANSE through the PolarVis project ”VISUAL PERSUASION IN A TRANSFORMING EUROPE: the affective and polarising power of visual content in online political discourse” and by the Swedish Research Council (VR) project “Visual Politics: A Deep Learning Approach to the Spread and Stick of Political Ideas”. University of Copenhagen M.S. Social Data Science, 2022 <ul style="list-style-type: none">• Thesis title: “RlassoModels: High-Dimensional Estimation and Inference in Python” Uppsala University B.S. Political Science, minor in Statistics, 2020 <ul style="list-style-type: none">• Thesis title: “Heritability for Social Trust Across Socioeconomic Status: Is There a Gene-Environment Interaction?” Sciences Po, Paris Erasmus Exchange, Political Science and Economics, 2019	
ACADEMIC POSITIONS	Uppsala University , Uppsala, Sweden <i>Doctoral Candidate</i> Mar 2023 – PhD student in Computer Science at the Division of Computing Science at the Department of Information Technology. Member of the Uppsala university Information Laboratory (InfoLab). <i>Application Expert</i> Sep 2022 - Dec 2023 Advanced user support and training at Uppsala University’s center for high performance computing, with a focus on the social sciences and humanities. Part of the Center for Digital Humanities. Involved in several research projects, providing technical and methodological support. University of Copenhagen , Copenhagen, Denmark <i>Research Assistant</i> Oct 2021 - June 2022 Part of the HOPE-project. Responsible for implementing, in Python, the collection and analysis of Twitter data for the project. <i>Teaching Assistant</i> Aug 2021 - Dec 2021 Teaching methods and programming at the Department of Sociology and the Department of Economics.	
PAPERS IN PREPARATION	Piqueras, Matías , Magnani, Matteo, Segerberg, Alexandra. “Visual Structural Topic Modeling for the Analysis of Political Communication: A Deep Generative Approach”.	

INVITED TALKS	<ul style="list-style-type: none"> • 2023, “Strucutral Image Clustering for the Analysis of Visuals in the Social Sciences”, Department of Statistics, Uppsala University • 2023, “Machine Learning and Text-as-Data”, PolMethods seminar, Department of Government, Uppsala University
TEACHING	<ul style="list-style-type: none"> • Spring 2023, Fall 2022, <i>UPPMAX introductory course to High Performance Computing</i>, Uppsala Multidisciplinary Center for Advanced Computational Science • Fall 2022, <i>Introduction to running R, Python, and Julia in HPC</i>, Uppsala Multidisciplinary Center for Advanced Computational Science • Fall 2022, <i>Using Python in an HPC environment</i>, Uppsala Multidisciplinary Center for Advanced Computational Science • Fall 2021, <i>Quantitative Methods</i>, Department of Sociology, University of Copenhagen • Summer 2021, <i>Introduction to Social Data Science</i>, Department of Economics, University of Copenhagen
SUPERVISION	<ul style="list-style-type: none"> • Spring 2024, Subject reviewer for Rouslan Postar’s Master thesis in Data Science: “Comparative Analysis of Polarization Detection Methods in Social Networks”, Department of Information Technology, Uppsala’
DEPARTMENTAL SERVICE	<ul style="list-style-type: none"> • Spring 2024, Reviewer for master applications in Data Science, Uppsala University
PHD COURSES	<ul style="list-style-type: none"> • Fall 2023, Advanced Probabilistic Machine Learning, Uppsala University • Fall 2023, Introduction to Image Analysis, Uppsala university • Fall 2023, Classical and Modern Papers in Image Analysis, Uppsala University • Readings on Facebook and Democratic Processes, Uppsala University • Summer 2023, The Summer Institute in Computational Social Science (SICCS), hosted by Linköping University • Spring 2023, Deep Learning for Image Analysis, Uppsala University • Spring 2023, Readings in Network Science, Uppsala University • Spring 2023, Introduction to PhD studies, Uppsala University
MEMBERSHIP IN ACADEMIC NETWORKS	<ul style="list-style-type: none"> • Uppsala University Information Laboratory (InfoLab) • Uppsala University Computational Social Science Lab • University of Copenhagen Social Data Science Alumni Association
PROFESSIONAL EXPERIENCE	<p>The Swedish Central Bank, Stockholm, Sweden</p> <p><i>Student Assistant at The Payments Department</i> May 2018 - June 2019</p> <p>Daily monitoring of the RIX-system - the Riksbank’s system for large payments between all major Swedish banks and clearing organisations</p>
SOFTWARE	<p>RlassoModels: Python implementation of “Rigorous Lasso” with theoretically justified penalty level for high-dimensional causal inference. Code: https://github.com/MatPiq/RlassoModels</p>
COMPUTER SKILLS	<ul style="list-style-type: none"> • Languages: Python, R, C++, Rust, Matlab, LaTeX • HPC: SLURM, EasyBuild, Singularity, MPI, OpenMP, Linux/Unix