Yen-Chieh (David) Liao

Research Fellow in Natural Language Processing
CAIG at the School of Government in the University of Birmingham
✉ davidycliao@gmail.com ⌨ davidycliao 🌐 davidycliao.github.io | *Updated:* Oct. 10, 2024

ACADEMIC POSITIONS

Research Fellow at the Centre for Artificial Intelligence in Government	Sep 2024 –
University of Birmingham	
Post-doctoral Researcher at th School of Politics and International Relations	Aug 2023 – Sep 2024
University College Dublin	
Pre-doctoral Researcher at the Chair of Comparative Politics	Dec 2021 – Dec 2022
University of Bamberg	

EDUCATION

PhD in Politics, University of Essex	Oct 2017 – Jan 2023
MA in Public Administration and Policy, National Taipei University	Sept 2010 – Feb 2014
BA in Public Administration and Policy, National Taipei University	Jun 2005 – Aug 2010

RESEARCH

Publications

2024 (Mis)perception of Party-voter Congruence and Satisfaction with Democracy. (with Li Tang and Royce Carroll) ***Political Science Research and Methods*** [DOI: https://doi.org/10.1017/psrm.2024.48]

2024 Electoral Reform and Fragmented Polarization: New Evidence from Taiwan Legislative Roll Calls. ***Legislative Studies Quarterly*** [DOI:https://doi.org/10.1111/lsq.12459]

2023 The Role of Rituals in Adversarial Parliaments: An Analysis of Expressions of Collegiality in the British House of Commons. ***Historical Social Research*** 48 (3): 209-234 (with David Beck and Thomas Saalfeld) [DOI: https://doi.org/10.12759/hsr.48.2023.31]

2015 The Rationale for Supporting Nuclear Power: Analysis of Taiwanese Public Opinion Survey. ***International Relations of the Asia-Pacific*** 15 (1): 147–176 (with Xiaochen Su, Chung-li Wu, Tai-De Lee and Chen Tsao) [DOI: https://doi.org/10.1093/irap/lcu019]

Under Review

Catalysts for Change? Mapping Policy Recommendations in Academic Publications on Climate Change and Net Zero Energy Systems. (with Brian Boyle, Stefan Müller, Sarah King and Robin Rauner) ***Invited Revise & Resubmit***

Selecting and Validating Classifiers for Multilingual and Cross-Domain Stance Detection. (with Stefan Müller)

Estimating Factions of Red Guard under Mao's China: A Slogan-based Text Scaling Method with Historical Documents. (with Yi-Nung Tsai)

Working Papers

Legislative Preferences for Pork Barrel Messages in Different Electoral Systems: A Case Study of Taiwan Using Fine-tuned Transformers

Widening the Focus: How Electoral Systems Converge Legislators' Issue Attention – An Analysis Using Taiwan Legislative Keywords (with Yu-Ceng Liao and Yi-ting Wang)

Shock Rhetoric: Local Exposure to China Trade Shocks and Rhetorical Extremism in the US House of Representatives. (with Zikai Li)

Grandstanding under the Spotlight: Unveiling European Elites Crisis Communication in the Council of the European Union. (with Paula Montano and James Cross)

ACADEMIC TRAINING

2023 *Oxford Large Language Models for Social Science Workshop*; *57th Essex Summer School in Social Science Data Analysis*, Advanced Survey Data Analysis and Survey Experiments

2022 *56th Essex Summer School in Social Science in Data Analysis*, Introduction to Social Network Analysis

2021 *Machine Learning Summer School*, Standard Training Programme; 55th Essex Summer School in Data Analysis, Advanced Methods for Text-as-Data: Natural Language Processing | Quantitative Methods for Causal Inference and Policy Evaluation

2019 *54th Essex Summer School in Social Science in Data Analysis*, Introduction to Bayesian Analysis for the Social Sciences

2018 *53rd Essex Summer School in Data Analysis*, Ideal Point Estimation and Scaling Methods | Generalized Linear Models

MAINTAINER OF OPEN-SOURCE TOOLKIT

flaiR: An R wrapper for accessing the Flair NLP library in Python. Flair NLP facilitates easy experimentation with state-of-the-art model configurations, such as BERT, ELMo, RoBERTa, and others hosted on Hugging Face (with Stefan Müller and The Connected_Politics).

legisTaiwan: An R package for accessing real-time Taiwan Legislative Data.

legisCrawler: Python-Based Automation Web Crawling Framework for Retrieving Parliamentary Questions from the Website of Taiwan's Legislative Yuan.

asmcjr: An R Package for Supporting the Book 'Analyzing Spatial Models of Choice and Judgment, 2nd Edition' and Streamlining Estimation Scaling and Visualization with ggplot2 (with Dave Armstrong, Royce Carroll, Christopher Hare, Ryan Bakker, Keith Poole and Howard Rosenthal).

bisCrawler: Python-Based Automation Web Crawling Framework for Retrieving Central Bankers' Speeches from the Bank for International Settlements.

TEACHING

Course and Module

2024 *University College Dublin* Quantitative Text Analysis (Led by Stefan Müller)

Guest Lecturer in Weeks on Word Embeddings and Transformers

Workshops and Seminars

2024 *SPIRe PhD Workshop University College Dublin* Basic Application of High-Performance Computing

2023 *GESIS Fall Seminar in Computational Social Science*

Instructor in Big Data and Computation for Social Data Science (Co-lecturing with Dr. Akitaka Matsuo)

2022 *55th Essex Summer School in Social Science Data Analysis*

Teaching Assistant in Quantitative Text Analysis

Teaching Assistant in Introduction to Programming in Python for Social Scientists

2021 *54th Essex Summer School in Social Science Data Analysis*

Teaching Assistant in Introduction to Quantitative Methods in R

2021 *EITM Europe Summer Institute*

Teaching Assistant in Quantitative Text Analysis Using R and Linking Theory with Text as Data

2020 *53rd Essex Summer School in Social Science Data Analysis*

Teaching Assistant in Introduction to Quantitative Text Analysis

2020 *ECPR Summer School*

Teaching Assistant in Machine Learning with Big Data for Social Scientists

2019 *53rd Essex Summer School in Social Science Data Analysis*

Teaching Assistant in Introduction to Quantitative Text Analysis

RESEARCH GRANTS & FUNDING

2023 The Scholarship for Attending Oxford Large Language Models for Social Science Workshop (£300)

2022 University of Essex Departmental Fund (£900) and Travel Grant from Taiwan's Council of Indigenous Peoples for attending 2022 MPSA Conference (USD$678)

2019 University of Essex Departmental Fund (£450) and Travel Grant from Taiwan's Council of Indigenous Peoples (USD$630) for attending 2019 EPSA Conference

2018 Attendance Scholarships (£250) to Essex Summer School in Social Science Data Analysis

2021–2022 Taiwan Overseas Pioneers Grants of Ministry of Science and Technology Taiwan (Aug 2021 - Jul 2022), USD$32,000

2017–2021 The Government Doctoral Scholarship in Legislative Studies and Comparative Politics, Ministry of Education Taiwan (Aug 2017- Jul 2021), USD$168,000

PRESENTATION (*: discussant ; +:poster)

2024 COMPTEXT Conference, Amsterdam; Annual Conference of the European Political Science Association, Cologne; Annual Conference of American Political Science Association, Philadelphia

2023 Annual Conference of the European Political Science Association, Glasgow; Annual Conference of the American Political Science Association, LA*; ECPR Standing Group on Parliaments, Vienna

2022 Annual Conference of European Consortium for Political Research, Innsbruck; PolMeth Summer Meeting, St. Louis USA+, COMPTEXT Conference, Dublin

2022 Machine Learning Summer School, Taiwan+; Annual Conference of American Political Science Association, Online

2019 Annual Conference of the European Political Science Association, Online; Asian PolMeth, Online

2018 Annual Conference of the European Political Science Association, Belfast

COMPUTING SKILLS

Programming : R, Python | **Database** : SQL, MongoDB | **HPCs** : SLURM, PBS

REFERENCE

Dr Stefan Müller (Postdoc PI)

Associate Professor in the School of Politics and International Relations, University College Dublin

Dr Thomas Saalfeld (Predoc PI)

Chair of Comparative Politics, University of Bamberg

Dr Royce Carroll (PhD Supervisor)

Professor in the Department of Government, University of Essex

Dr Nicole Baerg (PhD Supervisor)

Senior Lecturer in the Department of Government, University of Essex

Dr Jonathan Sullivan (PhD External Examiner)

Associate Professor in the School of Politics and International Relations, University of Nottingham