Mathieu Dubied

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Education

European University Institute — *Florence, Italy*
PHD RESEARCHER IN POLITICAL AND SOCIAL SCIENCES — *Sep 2025 - present*
- Supervisors: Kevin Munger, Arnout van de Rijt

New York University — *New York, United States*
RESEARCH VISIT AT NYU'S CENTER FOR SOCIAL MEDIA AND POLITCS — *Feb 2025 - May 2025*
- Visit of 4 months for the Master's thesis: "What Drives Toxic Comments on TikTok? Examining the Link Between Videos and Comments Using Machine Learning". Grade: 6/6

University of Zurich — *Zurich, Switzerland*
MASTER OF ARTS IN SOCIAL SCIENCES, POLITICAL SCIENCE — *2022 - 2025*
- Track: Democracy, Development and International Relations. Average grade: 5.78/6

ETH Zurich — *Zurich Switzerland*
MSC ROBOTICS, SYSTEMS AND CONTROL — *2021 - 2024*
- Focus on nonlinear system modeling and model predictive control. Average grade: 5.84/6

Imperial College London — *London, United Kingdom*
EXCHANGE YEAR (SEMP), MENG ELECTRICAL AND ELECTRONIC ENGINEERING — *2021 - 2022*
- Focus on multi-agent systems, optimization and machine learning. Average grade: A

ETH Zurich — *Zurich, Switzerland*
BSC MECHANICAL ENGINEERING — *2018 - 2021*
- Focus Specialization: Engineering for Health. Average grade: 5.71/6

Professional Experience

09/2024-present — **Research Assistant**, with Daniele Caramani, Department of Political Science, University of Zurich
Topic modeling, deep learning and LLM classifiers, data collection (web scraping) and visualisation.

08/2024-02/2025 — **Research Assistant**, with Johannes Köhler, Institute for Dynamic Systems and Control, ETH Zurich
Preparation for the publication of my master's thesis on learning-based model predictive control

02/2023-02/2025 — **Workshop Instructor**, GirlsCodeToo
Creation and teaching of a weekly programming course for girls between 9 and 12 years old

09/2024-01/2025 — **Teaching Assistant**, Department of Political Science, Universtity of Zurich
Preparation and teaching of weekly exercise sessions for the course "Political Systems and Theories"

01/2024-08/2024 — **Research Assistant**, with Isabelle Guinaudeau, Department of Political Science, University of Zurich
Development of a pipeline for the automated identification of social group mentions in newspapers

10/2023-01/2024 — **Research Assistant**, with Robert Katzschmann, Soft Robotics Lab, ETH Zurich
Independent research and preparation of a journal paper

04/2023-09/2023 — **Intern**, Short-term network modeling, Swissgrid
Development, testing, and deployment of an optimization application used in the grid control room

09/2022-03/2023 — **Head Teaching Assistant**, "Engineering Mechanics", ETH Zurich
Presentation of colloquia in front of over 200 students, preparation of lectures, exercises and exams

2020-2021 — **Teaching Assistant**, "Dynamics" and "Mechanics II", ETH Zurich
Teaching of weekly exercise sessions for 20-30 students in "Dynamics" and "Mechanics II"

Publications

PUBLISHED

M. Scott, **M. Dubied**, J. Pitt. November 2022. *Social Motives and Social Contracts in Cooperative Survival Games*. International Workshop on Coordination, Organizations, Institutions, Norms and Ethics for Governance of Multi-Agent Systems (COINE).

M. Dubied, M. Y. Michelis, A. Spielberg, R. K. Katzschmann. April 2022. *Sim-to-Real for Soft Robots using Differentiable FEM: Recipes for Meshing, Damping, and Actuation*. IEEE Robotics and Automation Letters (RA-L).

UNDER REVIEW

M. Dubied, A. Lahr, M. Zeilinger, J. Köhler. July 2025. *A Robust and Adaptive MPC Formulation for Gaussian Process Models*. Submitted to Automatica and available on arXiv.

S. Šarenkapa, I. Guinaudeau, E. Deiss-Helbig, **M. Dubied**, R. Heiberger, T. Matthieß. *Measuring Discursive Constructions of Social Categories in the Press.* Presented at the European Political Science Association (EPSA) 2025 annual conference.

M. Dubied, B. Guinaudeau, K. Donnay, J. A. Tucker. *What Drives Toxic Comments on TikTok? Examining the Link Between Videos and Comments Using Machine Learning.*

M. Dubied, P. Tiso, R. K. Katzschmann. *AquaROM: An Optimisation Pipeline for Soft Swimmers Using Nonlinear Parametric Reduced Order Models.*

Awards, Scholarships, & Grants

2025	**Merit Scholarship for Research Stay Abroad**, Vincent Merkle Foundation, 5000CHF
2024	**Nomination for the ETH "Diversity Award"**, nominated for the work at GirlsCodeToo
2024	**Selected Pitch**, ETH Sustainable Development Goals Pitch Event
2023	**Werner Siemens Fellowship**, Werner Siemens-Stiftung, 19200CHF
2021	**SEMP Scholarship**, ETH Zurich, 3800CHF
2021	**Merit Annual Scholarship**, Swiss Study Foundation, 20000CHF
2020	**Nomination for the "Outstanding Teaching Assistant Award"**, D-MAVT, ETH Zurich
2019	**Member of the Swiss Study Foundation**, Swiss Study Foundation
2019	**Winner of the "Innovation Project"**, PDZ, ETH Zurich
2005-2019	**Various prizes in swimming competitions**
2013	**Sciences Prize**, Cycle d'Orientation Sarine-Ouest

Volunteering and Services

10/2024-present	**Reviewer**, IEEE International Conference on Robotics and Automation (ICRA)
06/2024-present	**Board Member and Treasurer**, GirlsCodeToo
06/2023-present	**Active Member**, GirlsCodeToo
04/2022-present	**Secondary School Delegate**, Swiss Study Foundation
10/2023-02/2025	**Council Member**, University of Zurich Student Association (VSUZH)
08/2024-12/2024	**Reading Group Organizer**, Swiss Study Foundation
09/2015-08/2019	**Webmaster**, Fribourg Natation 1925
09/2016-08/2017	**High school student committee**, Collège Sainte-Croix, Fribourg
09/2015-08/2017	**Team Captain**, Fribourg Natation 1925

Additional Training (Selection)

07/2025	**Tableau de la Suisse: Switzerland's Model of Success**, Summer school of the Swiss Study Foundation (1 week)
09/2023	**Urban Forests – for Sustainable, Liveable and Healthy Cities**, Summer school of the Swiss Study Foundation (1 week)
08/2023	**Music, Computation and the Mind**, Summer school of the Swiss Study Foundation (1 week)
03/2022	**The Politics of Youth Representation at the United Nations**, Spring school of the German Study Foundation (1 week)
09/2021	**Fundamental Questions of State Theory and State Philosophy in the Early 21st Century**, Summer school of the Swiss Study Foundation (1 week)

Skills

Languages	French (native), English (C1), German (C1), Swiss German (B2), Italian (A2)
Softwares	Python, Matlab, R, C++, Go, PSSE, Gurobi, PyTorch, CasADI, Comsol, Abaqus, NX, LaTeX, TikZ

Interests and Hobbies

Technical and scientific topics, politics, history and environment.

Mountaineering (member of the Swiss Alpine Club), climbing, swimming, hiking, reading, tinkering and cooking.