

□ +44 (0) 7774 689143 | ■ nicola.cerutti@gmail.com | • ncerutti | • ncerutti

# Summary\_

Data scientist with a Ph.D. in behavioural economics and 10+ years of experience in causal inference, conducting and designing experiments, analysing and visualising complex datasets, and presenting findings in academic, institutional, and business settings. 5+ years of experience in data science, machine learning, neural networks for natural language processing (NLP). Solid coding, statistics, and econometrics background, passionate about AI and its applications in climate science.

## **Experience**

### **Oasis Loss Modelling Framework**

London, United Kingdom

SENIOR DATA SCIENTIST

• Development of ETL pipelines for catastrophe modelling.

Python dev.

### Mercator Research Institute on Global Commons and Climate Change (MCC)

Berlin, Germany

POSTDOCTORAL RESEARCHER (2021-2022) - GUEST RESEARCHER (2023)

Feb. 2021 - .

Oct. 2023 - .

- Leveraged **Python and R** for data wrangling, analysis, and visualisation for 7 scientific articles.
- Conducted **data analysis** of large datasets on food system greenhouse gas emissions (regressions, hypothesis testing).
- Used machine learning for systematic reviews, time-series forecasting and clustering.
- · Conducted field and web experiments on risk attitudes, preferences, gender, and behaviour under uncertainty.
- Collected policy descriptions from online databases and implemented machine learning (NLP) methods and gradient boosted decision trees to classify them.

#### **Berlin School of Economics and Law**

Berlin, Germany

LECTURER Sept. 2019 - Dec. 2020

- Taught the course in Environmental and Natural Resource Economics with a course rating of 5/6.
- Supervised M.Sc. Theses and exchange students.

University of Verona, Italy

POSTDOCTORAL RESEARCHER

Oct. 2018 - May. 2019

- Employed web scraping techniques to gather data on the public discourse on sustainability and analysed it with Natural Language Processing (NLP) methods, including classification with transformers and topic modelling.
- Co-managed the work of a consortium of five universities in a H2020 co-fund project (SUSCHOICE).
- Conducted qualitative interviews and administered surveys to sustainable food producers.

### **Joint Research Centre of the European Commission**

Ispra, Italy

TRAINEE

Jun. 2017 - Nov. 2017

- Collaborated in the testing and deployment of a large-scale mobile app-based experiment.
- Performed quality control, preliminary data analysis, and clustering of GPS tracking data.
- Served as a liaison between diverse teams including software developers, operations, science team, and stakeholders in a remote, multinational setting.
- Ensured legal compliance and GDPR adherence in the deployment of the mobile app.

## Education

Data Science Retreat

Berlin, Germany

DATA SCIENCE BOOTCAMP

Nov. 2022 - Feb. 2023

- Full-time bootcamp in data science with a focus on neural networks and machine learning.
- Topics and tech stack: Python, Scikit-learn, PyTorch, Docker, AWS, Git, CI/CD, NLP, Computer Vision.
- · Microsoft Azure AI Fundamentals Certified.

**Jacobs University**Bremen, Germany

Ph.D. IN ECONOMICS

Sept. 2012 - Oct. 2016

• My thesis, titled *Resource changes and cooperative behaviour* investigates the drivers of cooperation in common-pool resource use. I coded three experiments using z-tree and Java and analysed the panel data with R and STATA.

University of Turin Turin, Italy

MA IN SOCIOLOGY (110/110)

Mar. 2008 - Jul. 2011

OCTOBER 16, 2023 NICOLA CERUTTI 1

BA IN COMMUNICATION SCIENCES (99/110)

Sept. 2004 - Jan. 2008

# **Conferences and workshops**

**2018** Mediterranean Biodiversity Forum (Italian Trade Agency)

2015 Experiments in Environmental Economics (Leibniz Centre for Tropical Marine Research and University of Osnabrück)

**2014** 5<sup>th</sup> Lindau Nobel Laureate Meeting on Economic Sciences

Econometrics Summer School with STATA (Technical University of Lisbon)

IASC 3<sup>rd</sup> Regional European Conference (International Association for the Study of the Commons)

WOW5, Workshop on the Ostrom Workshop (Indiana University)

IFREE Experimental Economics graduate workshop (Chapman University)

**2012** Programming economic experiments with z-tree (University of Konstanz)

# **Grants & Awards**

2020 Grant: Hans-Riegel Foundation: 6000€ awarded through the Covid-19 Sonderförderung fund (Germany).

Grant: GrandUP: 5000€ awarded by the CRC Foundation (Italy).

Grant: CLIC Startups: 15000€ in consultancy fees awarded by the National Research Council (Italy).

**2019** Grant: Greenhouse Programme award: 5000€ by the European Commission's EIT Climate-KIC (Italy).

2014 Scholarship: IFREE Experimental Economics workshop, sponsored by Chapman University (USA).

Sponsorship: Nobel Laureates Meeting. Participation sponsored by the Leibniz Association (Switzerland).

**2013** Publication Prize for MA Thesis awarded by the BCC Foundation (Italy).

## **Publications**

Cerutti, N. A false sense of security? Face masks and social distancing. In Costa-Font, J., and Galizzi, M.M. (eds.). *Behavioural Economics and Policy for Pandemics*. Cambridge University Press. (exp. 2023)

Cerutti, N., Lamb, W. F., Crippa, M., Leip, A., Solazzo, E., Tubiello, F.N., Minx. J.C. Food System Emissions: A Review of Trends, Drivers, and Policy Approaches, 1990–2018. *Environmental Research Letters*, 18(7), 074030.

Diluiso, F., Walk, P., Manych, N., Cerutti, N., Chipiga, V., ... Minx, J. C. (2021). Coal transitions—part 1: a systematic map and review of case study learnings from regional, national, and local coal phase-out experiences. *Environmental Research Letters*, 16(11), 113003.

Seres, G., Balleyer, A., Cerutti, N., Friedrichsen, J., Süer, M. (2021). Face mask use and physical distancing before and after mandatory masking: No evidence on risk compensation in public waiting lines. *Journal of Economic Behavior & Organization*, 192, 765-781.

Seres, G., Balleyer, A. H., Cerutti, N., Danilov, A., Friedrichsen, J., Liu, Y., Süer, M. (2021). Face masks increase compliance with physical distancing recommendations during the COVID-19 pandemic. *Journal of the Economic Science Association*, 1-20.

Cerutti, N., Schlüter, A. (2019). Resource changes: exogenous or endogenous, gradual or abrupt. Experimental evidence. *International Journal of Environmental Studies*, 76(6), 1004-1018.

Cerutti, N. (2017). Social Dilemmas in Environmental Economics and Policy Considerations: A Review. Ethics in Progress, 8(1), 156-173.

Lowder, S., Ruggeri-Laderchi, C., Cerutti, N., Parsons, K. Food System Policies: a Global Snapshot from the Food System Policy Database (FSPD). R& R, Food Policy.

Cerutti, N. Classifying Food System Policies with Large Language Models. An online database (Planned outlet: Scientific Data).

## Skills

### SOFTWARE AND TECH STACK:

Advanced: Python, SQL, R, STATA, LaTeX, Scikit-learn

Intermediate: PyTorch, Azure, Tableau, Optuna, Docker, Git, Streamlit, Flask

Basic: AWS, HTML & css, Java, Django

#### LANGUAGES:

Italian (native), English (C2), German (C1), Spanish (B1)