

Andrea Tamburini

RESEARCHER · DEMOGRAPHY · DATA SCIENCE

Vienna Institute of Demography, Wittgenstein Centre (IIASA, OeAW, Univ. Vienna)

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Education

University of Vienna

PHD DEMOGRAPHY, VIENNA DOCTORAL SCHOOL OF SOCIAL SCIENCES

- Research Interests: statistical demography, machine learning, Bayesian statistics, spatial demography.
- Supervisor: Ass.-Prof. Erich Striessnig

Vienna (AT)

10.21 - present

Technical University of Munich

MASTER DEGREE IN MATHEMATICAL FINANCE AND ACTUARIAL SCIENCE

- Master Thesis: "Dynamic factor copula models and systemic risk in the banking sector" (grade: 1.3)

Munich (DE)

10.15 - 07.18

University of Milan

EXTRA-CURRICULUM MASTER COURSES:

- Probability theory.
- Probability calculus and mathematical statistics 2.

Milan (IT)

10.14 - 03.15

University of Milan

BACHELOR DEGREE IN MATHEMATICS

Milan (IT)

10.11 - 10.14

Professional Experience

Researcher

VIENNA INSTITUTE OF DEMOGRAPHY, RESEARCH GROUP POPULATION DATA AND PROJECTIONS

Vienna (AT)

07.26 - present

Researcher

IIASA, POPJUS PROGRAM

Projects: SPARCCE, BALANCE.

Vienna (AT)

01.24 - present

Researcher

VIENNA INSTITUTE OF DEMOGRAPHY

Human Capital Data Lab.

Vienna (AT)

01.22 - 12.24

Data scientist

GROUND TRUTH SOLUTIONS

Consultant (8/10 h/w) in the Stats team

Responsibilities:

- Shiny apps developer,
- R developer,
- data cleaning,
- data visualisations.

Vienna (AT)

07.22 - 12.23

Visiting researcher

NTNU - DEPARTMENT OF ENERGY AND PROCESS ENGINEERING - INDUSTRIAL ECOLOGY

Research collaboration related to the BALANCE project.

Trondheim (NO)

05.23

Research Assistant

HUMAN CAPITAL DATA LAB, VIENNA INSTITUTE OF DEMOGRAPHY

Vienna (AT)

09.20 - 12.21

Project: BayesEdu.

Responsibilities:

- data collection,
- literature review,
- mortality Bayesian model development,
- implementation and testing.

Risk Manager

RAIFFEISEN CENTROBANK

Vienna (AT)

05.18 - 05.20

Responsibilities:

- connecting role between the risk analysts and the developers,
- "Agile" project management,
- combined use of R and Oracle SQL.

Risk Manager

RAIFFEISEN CENTROBANK

Vienna (AT)

09.17 - 04.18

Part-time employment in the Market Risk department.

Responsibilities:

- review of internal models,
- combined use of R and Oracle SQL,
- improving the existing data infrastructure,
- development of complete and precise documentation.

Publications

Tamburini, A., The Geography of Future Human Capital in Europe: Regional Dynamics of Education and Aging. *IIASA Working Papers*

Tamburini, A., Bosco, C., Striessnig, S., 2026, Subnational disaggregation of SSP-coherent population projections for Europe. *Nature Scientific Data*

Tamburini, A., Wiśniowski A., Yıldız D., 2025, Bayesian multi-dimensional mortality reconstruction. *Demographic Research*

Tamburini, A., Bosco, C., Striessnig, S., 2025, A neural network architecture for disaggregating age-specific population projections to the sub-national level. *IIASA Working Paper, WP-25-003, Laxenburg, Austria.*

Tamburini, A., Wiśniowski, A., Yıldız, D., 2023, Education-specific adult mortality reconstruction across South-East Europe, Western Asia and North Africa: A hierarchical Bayesian approach. *VID Working Paper, Austrian Academy of Sciences, Vienna.*

IN PREPARATION

Olaya-Bucaro, O., **Tamburini, A.**, Striessnig, E., Bosco, C., Disaggregation of national level population projections to municipal level using a neural network approach.

Lucarno, R., **Tamburini, A.**, Double ageing in the unequal city: income inequality mediates the spatial fit between elderly population and ageing buildings.

Presentations

*presenting author

Tamburini, A.*, Bosco, C., Striessnig, E., 2025, A neural network architecture for disaggregating age-specific population projections to the sub-national level. GENPOPCLIMA Seminar Series, Bologna (IT), 25 June 2025. Oral presentation.

Olaya Bucaro, O., **Tamburini, A.***, Striessnig, E., Bosco, C., 2024, Disaggregation of national-level population projections to the municipal level using a neural network approach. EPC 2024 Annual Meeting, Edinburgh (UK). Oral Presentation.

Tamburini, A.*, Striessnig E., Muttarak R., Gao J., 2023, Assessing future vulnerabilities: a machine learning approach to multi-dimensional population projections at the sub-national level. PAA 2023 Annual Meeting. Oral Presentation.

- Tamburini, A.***, Striessnig E., Muttarak R., Gao J., 2022, Assessing future vulnerabilities: a machine learning approach to multi-dimensional population projections at the sub-national level. Wittgenstein Center Annual Conference 2022. Poster.
- Tamburini, A.***, Marginean I., "Quantifying future vulnerability to climate change: The importance of high-resolution population projections.". Scenarios Forum 2022. Oral presentation.
- Tamburini, A.***, Yıldız D., Wiśniowski A., "Bayesian multi-state mortality reconstruction". PAA 2022 Annual Meeting, Flash Session Oral presentation.
- Tamburini, A.***, Yıldız D., Wiśniowski A., "Bayesian multi-state mortality reconstruction". BSPS Virtual Conference 2021. Oral presentation.
- Tamburini, A.***, Yıldız D., Wiśniowski A., "Bayesian multi-state mortality reconstruction". IPC 2021 Conference. Oral presentation.

Additional trainings and contributions _____

Participant

4th ÖAW AI Graduate School

Austrian Academy of Science, January 2025.

Participant

Spatial Econometrics Advanced Institute 2023

Held by the Spatial Econometrics Association, June 2023.

Conference Coordinator with the organising Team

The Wittgenstein Center Conference 2022 on "Population and Climate Change: The Defining Relationship of the 21st Century"

ÖAW, Vienna (AT), Nov-Dec 2022.

Participant

Annual IPSA-HSE Summer School for Methods of Political and Social Research - Bayesian Statistics

National Research University Higher School of Economics, St. Petersburg (RU), August 2022.

Participant

Topics in Digital and Computational Demography – online course

Max Planck Institute for Demographic Research, Rostock (DE), November 2021.

Reviews _____

npj Climate Action

Statistical Methods & Applications

Software Skills _____

R: advanced.

Python: proficient.

SQL: intermediate.

Excel: advanced.

Language Skills

Italian: native.

English: fluent (working language).

German: fluent.

French: basic.