

VALERIA SECCHINI

PROFILE



Nationality:
Italian

Date of birth:
06/10/1994

CONTACTS

- Prague
- +39 320 846 0285
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- <https://it.linkedin.com/in/valeria-secchini>

LANGUAGES

- English C1
(7.5 C1 2023 IELTS Certificate)
- Italian C2

CODING AND SIMULATION SOFTWARES

- Python very good
- NetLogo command
- Mathematica good command
- C++ good command
- MATLAB fair command

DIGITAL SKILLS

- Unix/Linux: independent user
- LaTeX: very good
- GitHub: command
- Office Suite: very good command

RESEARCH ACTIVITY

JUNIOR RESEARCHER in CORPTAX team

Charles University, Prague (07/2021 - now)

- Topic: Multinational Corporations' (MNCs') taxation and shifting of their profits into tax havens
- Task: Understanding the tax loss of countries due to MNCs profits shifting and how this flow of profits is organized

EDUCATION

PhD STUDENT in Economics and Finance

Charles University, Prague (10/2021 - now)

Principal subjects covered:

- Taxation and Multinational Corporations
- Computational Economics
- Network Analysis

Skills acquired:

- Improved ability to carry out research both independently and in team
- Improved academic writing ability through workshops and the actual writing of papers and research proposals
- Ability to present research projects to and engage with audience/teams with different backgrounds (for example through the participation both in Economics and Complexity conferences)

MASTER'S DEGREE in PHYSICS OF COMPLEX SYSTEMS (Final evaluation: 110/110 cum laude)

University of Turin, Italy (12/2018 – 12/2020)

Principal subjects covered:

- Agent-Based Modelling
- Machine and Deep Learning
- Micro-Economics
- Economic Complexity
- Dynamical Systems
- Stochastic Processes
- Statistical Mechanics
- Network Analysis
- Statistics

Skills acquired:

- Knowledge of complexity science and ability to model and understand social and economic systems through an interdisciplinary approach
- Development of the ability to carry out research activity and teamwork during my master's thesis work and publication

BACHELOR'S DEGREE in PHYSICS

University of Padua, Italy (10/2013 – 07/2018)

TEACHING EXPERIENCE

- **Teaching Assistantship** in the academic course of Introductory Statistics, "Charles University", Prague (02/2022 – 09/2022)
- **Teaching Assistantship** in the academic course of Public Finance, "Charles University", Prague (2022 and 2023)
- **Teaching Assistantship** in the academic course of Principles of Economics

I, "Charles University", Prague (2021 and 2022)

- **Tutor in Mathematics** in Middle School "Peyron-Re Umberto I", Turin (Italy) (02/2019 - 06/2019)

PUBLICATIONS

- Bellomo N., Burini D., Secchini V., Terna P., "**Active Particles Methods in Economics**", Elements in Complexity and Agent-based Economics, Cambridge University Press, 2024 (Upcoming) s. 1–44.
- Bellomo N., Esfahanian M., Secchini V., Terna P. "**What is Life? Active particles tools towards behavioral dynamics in social-biology and economics**", Physics of Life Reviews, 2022, 43, 189-207
- Garcia-Bernardo, J., Haberly, D., Janský, P., Palanský, M., & Secchini, V. (2022). "**The indirect costs of corporate tax avoidance exacerbate cross-country inequality**" (No. 2022/33). *WIDER Working Paper*.
- Knopoff, D.; Secchini, V.; Terna, P. "**Cherry Picking: Consumer Choices in Swarm Dynamics, Considering Price and Quality of Goods**". Symmetry 2020, 12, 1912.

PROJECTS

- **Master's Thesis Project**,
"*Cherry Picking: Consumers' Choices in a Swarm Dynamics Considering Price and Quality of Goods*", text as "Project_Full_Text" in:
<https://github.com/Valer7a/Cherry-Pickingin-a-Decentralized-Hayekian-Market-with-Quality-described-through-Swam-Theory>
- **Econophysics agent-based model project**,
"*Market Efficiency Under Different Dynamics in the Mall*" :
<https://terna.to.it/tesineEconofisica/marketEfficiency.htm>
- **Deep Learning projects**,
- "*Text classification, through fine-tuned Word2Vec and Doc2Vec*":
<https://www.kaggle.com/valeriasecchini/text-classif-fine-tuned-word2vec-and-doc2vec> ,
- "*Classification of the gender of authors' tweets*"
<https://www.kaggle.com/valeriasecchini/notebook-valeria-secchini-data-mining-project>
- "*Classification of names in patent litigation*"
<https://www.kaggle.com/valeriasecchini/task5-valeriasecchini>
- **Network analysis**:
"*Analysis of Political Books Network*" :
<https://github.com/Valer7a/Analysis-of-Political-Books-Network/settings>
- **Bachelor's Thesis Project**,
"*Order-Book's dynamics: Stigler model*" :
<http://tesi.cab.unipd.it/61240/>

AWARDED GRANTS

- **GA UK**:
Doctoral Grant awarded by Charles University for my research proposal on Multinational Corporations tax avoidance
- **Swaantje Mondt Fund**:
Awarded by Utrecht University (UU) both in 2022 and in 2023 to visit the Centre for Complex Systems Studies and carry out my research on higher orders in networks with Assistant Professor Javier Garcia Bernardo.