

# Federica ONORI, PHD

**Doctor in Statistics** with **6+ years** of working experience in data modelling and quantitative analysis in international organisations (European Commission, World Bank group, UNFAO) and research institutions (Sapienza University of Rome, Roma Tre University, Technical University of Munich).

Currently working as **Statistical Assistant** at the **European Commission** (DG TRADE.A3, Chief Economist, Trade Analysis and Evaluation).

Proactive and solution-oriented, I am in the process of enlarging my knowledge and competences also in the **Economic field**.

*Ph.D Thesis title:* "Official Statistics and Sustainable Development Goals (SDGs): statistical tools for handling complexity and comparability across countries"

## WORK

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NOV 2021 - PRESENT	Statistical assistant at <b>EUROPEAN COMMISSION</b> , Bruxelles  <i>Statistical Assistant in the Statistics Sector of DG TRADE.A3 (Chief Economist, Trade Analysis and Evaluation)</i> <ul style="list-style-type: none"><li>• <b>Compilation of trade-related statistics</b> in collaboration with data providers (mainly Eurostat), IT experts and clients.</li><li>• <b>Analysis of trade policy</b> issues (Network Analysis, Impact Assessment Analysis, etc...).</li></ul>
JUN 2017 - AUG 2021  [37 MONTHS]	Short Term Consultant at <b>WORLD BANK GROUP</b>  <i>Consultant to the staff of International Finance Corporation (IFC)</i> <ul style="list-style-type: none"><li>• <b>Psychometric data analysis</b> of indicators related to Food Security, Consumption, Economic Status and Coping Strategies.</li><li>• Software used: R.</li></ul>
APR 2021 - JULY 2021  [4 MONTHS]	Traineeship at <b>EUROPEAN COMMISSION</b> , Bruxelles  <i>Trainee at SANTE.DDG2.D.3 (International Bilateral Relations)</i> <ul style="list-style-type: none"><li>• <b>Food Safety and Sustainable Food System (SFS)</b>, in particular Sanitary and Phytosanitary matters with Latin American countries.</li><li>• Implementation of the <b>Farm to Fork</b> strategy.</li></ul>
FEB 2018 - SEP 2019  [16 MONTHS]	Teaching assistant at <b>ROMA TRE UNIVERSITY</b> , Rome  <i>Teaching assistant in Statistics for the following courses:</i> <ul style="list-style-type: none"><li>• SPRING 2019, <i>Bachelor Degree in Political Sciences</i></li><li>• SPRING 2018, <i>Bachelor Degree in Economics</i></li></ul>
NOV 2017 - MAR 2021  [41 MONTHS]	Ph.D Student Researcher at <b>SAPIENZA UNIVERSITY OF ROME</b> , Rome  <i>Ph.D Student Researcher in Methodological Statistics</i> <ul style="list-style-type: none"><li>• <b>Research activity</b> in the statistical field: <i>Graphical models, Bayesian Networks, Latent variable models, Item Response Theory.</i></li><li>• Peer-reviewed publications in scientific journals and presentations in international conferences.</li></ul>

DEC 2016 - APR 2017	Internship at <b>FOOD AND AGRICULTURE ORGANIZATION (FAO)</b> , Rome
[5 MONTHS]	<p><i>Intern at the UN FAO Statistics Division</i></p> <ul style="list-style-type: none"> <li>• <b>Psychometric data analysis</b> of the Food Insecurity Experience Scale.</li> <li>• Data handling and validation.</li> <li>• Software used: R.</li> </ul>
DEC 2014-JAN 2015	Junior Consultant at <b>GIANO SOLUTION s.r.l.</b> , Rome
[2 MONTH]	<p><i>Business Intelligence (BI) Junior Consultant</i></p> <ul style="list-style-type: none"> <li>• Designing applications for <b>statistical analysis and data visualization tools</b> meant to be fully operative on the internal databases of the clients.</li> <li>• Software used: QlikView.</li> </ul>

## EDUCATION

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2017 - 2021	<p><b>Ph.D. in Methodological Statistics</b>  <b>SAPIENZA UNIVERSITY OF ROME</b>, Rome, Italy  <i>Grade: Very Good</i></p> <p><i>Thesis title: "Official Statistics and Sustainable Development Goals (SDGs): statistical tools for handling complexity and comparability across countries"</i></p>
2020	<p><b>Visiting Ph.D Research period</b>  <b>TECHNICAL UNIVERSITY OF MUNICH</b>, Munich, Germany</p>
2017	<p><b>Master of Science in Bayesian Statistics and Decision Sciences</b>  (DOUBLE DEGREE PROGRAM)  <b>SAPIENZA UNIVERSITY OF ROME</b>, Rome  <i>110/110 cum laude</i></p>
2016	<p><b>Master of Science in Mathématiques Appliquées parcours MASH</b>  (MATHÉMATIQUES, APPRENTISSAGE ET SCIENCES HUMAINES),  <b>UNIVERSITÉ PARIS DAUPHINE</b>, Paris, France  <i>Mention: Bien</i></p>
2011	<p><b>Bachelor Degree in Mathematics</b>  <b>SAPIENZA UNIVERSITY OF ROME</b>, Rome  <i>108/110</i></p>

## PUBLICATIONS & CONFERENCE PAPERS

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- 2021 **Onori F, Viviani S, Brutti P ;**  
**Towards global monitoring: equating the Food Insecurity Experience Scale (FIES) and food insecurity scales in Latin America,**  
To appear in "Models for Data Analysis. Selected papers of 49th Meeting of Italian Statistical Society".  
arXiv:stat.AP/2102.10005 (2021)
- 2021 **Onori F, Dhillon P, Dinachandra K, Jaleel A, Saraswat A, Reshmi R. S., Unisa S., Sethi V.**  
**An adaptation of the Food Insecurity Experience Scale (FIES) for Measuring Food Insecurity among Women in Socially Backward Communities,**  
In: "Asian Journal of Agriculture and Development (2021)", <https://doi.org/10.37801/ajad2021.18.1.5>.
- 2020 **Onori F, Jona Lasinio G.**  
**Modeling "Equitable and Sustainable Well-Being"(BES) using Bayesian Networks: A case study of the Italian Regions.**  
In: "Soc Indic Res (2020)", <https://doi.org/10.1007/s11205-020-02406-8>.
- 2020 Amendola C., Dettling P., Drton M., **Onori F.** and Wu J. ,  
**Structure Learning for Cyclic Linear Causal Models,**  
In: "Uncertainty in Artificial Intelligence (UAI 2020)". arXiv:stat.ML/2006.05978 (2020)
- 2018 **Onori F, Viviani S, Brutti P ;**  
**Equating experience-based food insecurity scales**  
In: **SIS2018 Proceedings.** ISBN-9788891910233, Palermo, 20-22/06/2018

## SCHOOLS

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- 2-6 MAY 2022 **ROBUST STATISTICS: FOUNDATIONS AND RECENT DEVELOPMENTS**  
University of Milano-Bicocca,  
**Como (Italy)**
- 23-25 OCTOBER 2019 **GRAPHICAL MODELS: CONDITIONAL INDEPENDENCE AND ALGEBRAIC STRUCTURES**  
Technical University of Munich,  
**Munich (Germany)**
- 1-5 JULY 2019 **FEATURE SUBSET SELECTION**  
Madrid UPM Advanced Statistics and Data Mining Summer School,  
Universidad Politécnica de Madrid  
**Madrid (Spain)**
- 1-5 JULY 2019 **UNSUPERVISED PATTERN RECOGNITION**  
Madrid UPM Advanced Statistics and Data Mining Summer School,  
Universidad Politécnica de Madrid  
**Madrid (Spain)**
- 24-28 JUNE 2019 **BAYESIAN DEMOGRAPHY**  
Applied Bayesian Statistics Summer School,  
Consiglio Nazionale delle Ricerche C.N.R. and Cattolica University,  
**Como (Italy)**
- 7-10 MAY 2019 **METHODS FOR CONSTRUCTING SYNTHETIC INDICATORS: THEORY AND PRACTICE**  
School of the Italian Statistical Society (SIS),  
Consiglio Nazionale delle Ricerche C.N.R.,  
**Rome (Italy)**
- 18-22 FEBRUARY 2019 **THEORY AND PRACTICE ON RANDOM EFFECT MODELS  
FOR MULTILEVEL AND LONGITUDINAL DATA,**  
School of the Italian Statistical Society (SIS),  
University of Florence,  
**Florence (Italy)**
- 20-21 NOVEMBER 2018 **WORKSHOP ON UNCERTAINTY AND COMPLEXITY OF MIGRATION,**  
Part of the ERC project on Bayesian Agent-Based Population Studies,  
Centre for Population Change (CPC) and University of Southampton,  
**London (United Kingdom)**
- JULY 2018 **SUMMER SCHOOL, SMI, Scuola Matematica Interuniversitaria.**  
Course on High Dimensional Probability For Mathematicians  
and Data Scientists  
**Cortona (Italy)**

## TALKS

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- AUGUST 3–6, 2020 Conference on Uncertainty in Artificial Intelligence (UAI2020),  
**Toronto**, virtual online.  
Title of the talk: **Structure Learning for Cyclic Linear Causal Models**
- JULY 22–26, 2019 32nd Scientific Meeting of the European Meeting of Statisticians (EMS),  
**Palermo**, Italy.  
Title of the talk: **Experience-based food insecurity scales, a non-aggregative approach to synthesis of indicators.**
- MAY 23 –24, 2019 56th Scientific Meeting of the Italian Society of Economy, Demography  
and Statistics (SIEDS), **Ascoli Piceno**, Italy.  
Title of the talk: **Modeling Equitable and Sustainable Well-Being (Bes)  
using Bayesian Networks: a case study of the Italian Regions.**
- JUNE 20 –22, 2018 49th Scientific Meeting of the Italian Statistical Society (SIS), **Palermo**, Italy.  
Title of the talk: **Equating experience-based food insecurity scales.**

## GRANTS, AWARDS & SCHOLARSHIPS

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- 2019 Research Grant for Junior Researcher "Avvio alla Ricerca", University of Rome La Sapienza  
2017 Phd Scholarship, Sapienza University of Rome (3 years full coverage)  
2015 International Program fellowship, Sapienza University of Rome  
2011 Erasmus Program scholarship, University of Rome  
2009-10-11 Best Student scholarship, Sapienza University of Rome

## LANGUAGES

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- ITALIAN: Native speaker  
ENGLISH: Fluent (Cambridge CAE, C1)  
SPANISH: Advanced (assessed level C1.1.1 on the EU Learning Language portal the European Commission)  
FRENCH: Advanced (assessed level C1.1.1 on the EU Learning Language portal the European Commission)

## COMPUTER SKILLS

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- Languages and Softwares: R, Stata, Python, Matlab, C++, WinBugs, Microsoft Office,  $\text{\LaTeX}$   
Mathematica, QlikView, SAS (certified), NetLogo, Julia (certified)  
Operating Systems: MICROSOFT WINDOWS, UNIX, OS

## CERTIFICATES

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- 2020 Machine Learning Using SAS Viya. SAS Institute  
2018 SAS Predictive Modeller using SAS Enterprise Miner. SAS Institute  
2018 Julia Scientific Programming by University of Cape Town on Coursera  
2015 Certificate in Advanced English (CAE) – Cambridge ESOL Level C1  
2002 Certificate in French language "DELFI scholaire A1-A2"

## EDITORIAL ACTIVITIES

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Referee for: *Social Indicators Research*, *Socio-Economic Planning Sciences*, *Frontiers in Forests and Global Change*.

I hereby authorize the use of my personal data in compliance with the Italian law N° 675/96.