

# Carlo Bottai | Curriculum Vitæ

Lungo Dora Siena 100A – 10153 – Turin (TO), Italy

+39 011 670 9382 • [✉ carlo.bottai@unito.it](mailto:carlo.bottai@unito.it) • [in](#) carlobottai  
[🐦](#) carlobottai • [🌐](#) n3ssuno • Fiesole (Florence), Italy; 1986

## Current position

**Ph.D. Student at *Vilfredo Pareto* Doctorate in *Economics and Complexity*** **Turin**  
*Dep. of Economics and Statistics, University of Turin & Collegio Carlo Alberto* *since Oct 2015*  
Supervisor: Prof. Aldo Geuna

## Research interests

Economics of Innovation  
Complex Networks Economics

Economic and Business History  
Regional and Urban Economics

## Education

**CID - Kennedy School of Government, Harvard University** **Cambridge (MA)**  
*Visiting student* *Sep – Dec 2018*  
Growth Lab (supervisor Dr. Frank Neffke; director Prof. Ricardo Hausmann)

**INET at the Oxford Martin School and Math. Institute, University of Oxford** **Oxford (UK)**  
*Visiting student* *Oct – Dec 2017*  
Complexity Economics group (director Prof. J. Doyne Farmer)

**Collegio Carlo Alberto** **Moncalieri, Turin**  
*Master of Arts in Economics and Complexity, average grade 28 /30* *Aug 2014 – Sep 2015*  
Focused on Complexity Economics, Agent-based Modelling, Complex Network Analysis.  
All courses are taught in English.

**Alma Mater Studiorum · Bologna University** **Bologna**  
*Master's degree in Economics, summa cum laude* *Sep 2009 – Oct 2013*

**University of Florence** **Florence**  
*Bachelor's degree in Political Sciences* *Sep 2005 – Dec 2009*

## Working Experience

**Research assistant** **Turin**  
*ISMEL* *Sep 2016 – Mar 2017*  
Integration and revision of the Italian automotive firms historical database.

## Teaching Experience

**Introduction to  $\LaTeX$**  **Collegio Einaudi, Turin**  
*Italian* *May 2017*  
Introductory course about  $\LaTeX$  of 12 hours for the students of the Collegio Universitario R. Einaudi of Turin.

## Conferences and Summer/Winter Schools

---

### Speaker.....

<b>YSI Workshop in “Innovation, Econ. Complexity and Econ. Geography”</b> <i>YSI &amp; MIT Media Lab</i> “What Do We Measure When We Measure Regional Relatedness?”	<b>Cambridge (MA)</b> <i>Aug 2018</i>
<b>WICI conference on “Modelling Complex Urban Environments”</b> <i>University of Waterloo</i> “Urban Scaling: A Bayesian Panel Data Approach” (with C. Nava)	<b>Waterloo (CA)</b> <i>Jun 2018</i>
<b>International Workshop on “Rethinking Clusters”</b> <i>University of Florence</i> “What Do We Measure When We Measure Regional Relatedness?”	<b>Florence (IT)</b> <i>May 2018</i>
<b>1st RENIR Meeting</b> <i>Brick-CCA, EST-UniTo, PoliTo and Munk School of Global Affairs</i> “What Do We Measure When We Measure Regional Relatedness?” and “Urban Scaling: A Bayesian Panel Data Approach” (with C. Nava)	<b>Turin (IT)</b> <i>Feb 2018</i>
<b>4th Geography of Innovation Conference (GeolInno2018)</b> <i>University of Barcelona</i> “What Do We Measure When We Measure Regional Relatedness?”	<b>Barcelona (ES)</b> <i>Jan 2018</i>
<b>5th Ph.D. Workshop in Econ. of Innovation, Complexity and Knowledge</b> <i>UniTo and Brick-CCA</i> “What Do We Measure When We Measure Regional Relatedness?”	<b>Turin (IT)</b> <i>Dec 2017</i>
<b>LabNET Research Seminar</b> <i>ESt-UniTo and LabNET</i> “Network imprenditoriali e cambiamento strutturale: La <i>business community</i> di Torino, 1883-1907” (with I. Balbo)	<b>Turin (IT)</b> <i>Dec 2016</i>

### Organiser.....

<b>6th Ph.D. Workshop in Econ. of Innovation, Complexity and Knowledge</b> <i>UniTo, Brick-CCA and INET-YSI. Keynote speakers: M. Riccaboni, G. Marin, E. Miguez</i>	<b>Turin (IT)</b> <i>Jan 2019</i>
<b>5th Ph.D. Workshop in Econ. of Innovation, Complexity and Knowledge</b> <i>UniTo and Brick-CCA. Keynote speakers: F. Neffke, T. Heirich</i>	<b>Turin (IT)</b> <i>Dec 2017</i>

### Attendee.....

<b>4th Ph.D. Workshop in Econ. of Innovation, Complexity and Knowledge</b> <i>UniTo and Brick-CCA. Keynote speakers: J. Bollen, E. Giuliani, D. Consoli</i>	<b>Turin (IT)</b> <i>Dec 2016</i>
<b>Resurrection or Reinvention: Industrial Resilience in Traditional Manufacturing Reg.</b> <i>Brick-CCA, EST-UniTo, PoliTo, Munk School of Global Affairs, ISMEL- Polo del Novecento</i>	<b>Turin (IT)</b> <i>Nov 2016</i>
<b>13th annual conference of the European Network on the Economics of the Firm</b> <i>ENEF. Keynote speakers: Cristiano Antonelli, Mike Wright, Roberto Zoboli</i>	<b>Turin (IT)</b> <i>Sep 2016</i>
<b>SIENA Winter School on Longitudinal Social Network Analysis</b> <i>ETH Zürich. Courses taught by Snijders, Steglich, Block and Stadtfeld</i>	<b>Zürich (CH)</b> <i>Feb 2016</i>
<b>3rd Ph.D. Workshop in Econ. of Innovation, Complexity and Knowledge</b> <i>UniTo and Brick-CCA. Keynote speakers: U. Witt, M. Vivarelli, F. Squazzoni</i>	<b>Turin (IT)</b> <i>Jan 2016</i>
<b>Workshop on Adaptive and Ecological Rationality in Complex Environments</b> <i>International Herbert A. Simon Society</i>	<b>Turin (IT)</b> <i>Jan 2016</i>
<b>1st Ancona-Milano Summer School on Agent-Based Economics</b> <i>Università Politecnica delle Marche and Università Cattolica del Sacro Cuore</i>	<b>Ancona (IT)</b> <i>Sep 2015</i>
<b>KID Summer School on Knowledge Dynamics, Industrial Evol., Econ. Development</b> <i>Eurkind - European Network on Knowledge, Innovation, Development</i> Presentation title: “Knowledge Clusters and Multidimensional Proximity: an Agent-Based Simulation” (with M. Iori)	<b>Nice (FR)</b> <i>Jul 2015</i>

**Luigi Einaudi Advanced School in Anthropology of Freedom**  
*Associazione Polis, Invited speaker V. Vanberg*  
**Conference on Economic Change and Evolution**  
*Accademia Nazionale dei Lincei*

**Dogliani, Cuneo (IT)**  
*Jun 2015*  
**Rome (IT)**  
*Nov 2014*

## Awards and scholarships

---

**PhD scholarship (first graded XXXI cycle)**  
*University of Turin · Vilfredo Pareto Doctorate in Economics* Oct 2015

**Master's thesis worthy of mention**  
*Fondazione Manlio Resta graduation award 2014* May 2015

**Master with full tuition waiver**  
*Collegio Carlo Alberto* Aug 2014

## Reviewer

---

Economics of Innovation and New Technology

## Other Economics courses and certificates

---

**Fractals and Scaling**  
*Santa Fe Institute, MOOC on Complexity Explorer, 9 weeks, grade 91%* 2018

**Social and Economic Networks: Models and Analysis**  
*Stanford, MOOC on Coursera, 9 weeks, grade 82%* 2015

**Introduction to Complexity**  
*Santa Fe Institute, MOOC on Complexity Explorer, 11 weeks, grade 98%* 2015

**Calculus One**  
*Ohio State University, MOOC on Coursera, 14 weeks, grade 94% with distinction* 2014

**Social Report**  
*CNGEI jointly with University of Rome · La Sapienza* 2012

## Languages

---

**Italian:** Mother tongue

**English:** Upper intermediate (B2-C1) Proficient


## Computer skills

---

**Operating Systems**.....

**GNU/Linux** Arch Linux  **Other** Windows, Mac OSX 

**Office suites**.....

**LibreOffice; MS Office; Google Drive** 

**Markup languages**.....

**HTML/CSS** (also some toolkit link Bootstrap)  **LaTeX** (also TeX minimum programming) 

**Programming languages**.....

**R**  **NetLogo** 

**Python**  **Other** JavaScript, PHP, Julia 

## Scientific applications.....

<b>Gephi</b>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>QGIS</b>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>OpenRefine</b>		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Database</b>	MySQL, Neo4j	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Other</b>	Stata, Mathematica, D3.js	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

## Other skills.....

<b>CMS</b>	WordPress (admin and develop.)	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Git</b>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>LAMP</b>	servers administration	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Amazon AWS</b>		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

## Personal skills

---

**Team spirit and ability to adapt to multicultural environments** thanks to the experience at the CNGEI, scout association, from 1994, also as a group leader.

**Leadership skills** obtained as Troop Leader (in charge of a small group of adults and of 25 boys and girls from 12 to 16 years old) at the scout association CNGEI of Florence from 2007 to 2009.

**Organizational skills** shown being in charge of the logistics of a meeting of CNGEI for about 450 young people and 100 adults from all over Italy which was held in the summer of 2012 for 5 days in Tuscany. In 2016 and 2017 I was the head of two similar Scout Camps of about 150-200 people.

In 2008, after attending two practical course of one week each and having presented an educational project, I also got the **Wood Badge patent**, recognized by the internationally scout organization WOSM.

## Publications

---

**2015** "Open Innovation in a Model à la Hotelling", Working Papers of the Department of Economics and Statistics *Cognetti de Martiis* · University of Turin, 26

"Knowledge Clusters and Multidimensional Proximity: An Agent-Based Simulation", Working Papers of the Department of Economics and Statistics *Cognetti de Martiis* · University of Turin, 28, with M. Iori

## Work in progress.....

"Following the Evolution of the Network: The Business Community of Tunin, 1883–1907"

"Measures of Regional Technological Diversification: A Critical Review"

"Technological Diversity and Resilience in Europe"

"Urban Scaling: A Panel Data Approach", with C. Nava

"Inter-industry Labor Flows in Italy: Constraints and Opportunities for a Technological Transition", with M. Guerzoni

## Code for scientific applications.....

**2018** "ReKS: Regional Knowledge Space" (R Package): <https://github.com/n3ssuno/ReKS/>