

Ernesto Carrella

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Employment

University of Oxford <i>PostDoc</i>	Oxford, UK 2015–present
George Mason University <i>Research Assistant</i>	Fairfax, VA 2010–2015

Education

George Mason University <i>PHD, Computational Social Science</i>	Fairfax, VA 2010–2015
University of Illinois <i>M.Sc Economic Policy</i> Specialization in Advanced Econometrics	Urbana, IL 2008–2010
Chinese University of Hong Kong <i>B.Sc Economics</i>	Hong Kong 2005–2008

Papers

Journal Articles.....

- E.Carrella, "Zero-Knowledge Traders",
Journal of Artificial Societies and Social Simulation, 17(3)4. 2014
[📄 final paper](#) [📁 github repository](#) [📺 presentation slides](#)

Work in Progress.....

- E.Carrella, "Sticky Prices Microfoundations in a Agent Based Model Supply Chain"
Revise & Resubmit
[📄 draft paper](#) [📁 github repository](#) [📺 presentation slides](#) [📺 presentation video](#)
- E.Carrella, "A Cybernetic Model of Macroeconomic Disequilibrium"
[📄 draft paper](#) [📁 github repository](#)

Conference Papers.....

- E.Carrella, "A Multi-Threaded Economy",
Presented at the Computing in Economics and Finance, 2012
[📄 conference paper](#) [📁 github repository](#)
- E.Carrella and M. Hendrey, "An Order Book Immediacy Model",
Presented at the Workshop on Economic Heterogeneous Interacting Agents., 2012 ,
[📄 conference paper](#)
- E.Carrella, "The Taxicab Market: simple ripoffs dynamics",
Presented at the SPP Graduate Research Conference, 2012 ,
[📄 conference paper](#)

Awards

George Mason University

Presidential Scholar Grant

Tuition waiver and stipend for 3 years with 20 hours a week of research assistantship

Professors assisted:

- Worked for Dr. [Matthew Hendrey](#);
 - Financial simulation, order book dynamics
- Worked for Prof. [Andrew Crooks](#);
 - 3D simulation, open-sim
- Worked for Dr. [Maksim Tsvetovat](#);
 - Textual analysis and data mining
- Worked for Prof. [Doyne Farmer](#), [Rob Axtell](#), [Peter Howitt](#)
 - Housing market modeling and unit testing

Fairfax, VA

2010–present

Languages

English: Fluent

Italian: Native

Computer skills

Java: JUnit, Swing, JavaFX, Concurrency

Statistics: R, MySQL

ABM: MASON, NetLogo

Authoring: \LaTeX , Markdown, KnitR, Jekyll

Statistic skills

Classic Econometrics: Least Squares, Kalman Filters, Time Series, Survival Analysis

Non-Parametrics: Kernel Regressions, Support Vector Machines, Random Forests

Machine Learning: Cross-Validation and Model Selection, Monte Carlo modeling

Immigration Status

Citizenship: Italian

US Visa: F1

with OPT and CPT available