

*Department of International Economics | The Graduate Institute
Geneva, Switzerland*

Research Interests

Internet and Telecommunications adoption | Microeconomic estimators | Artificial Neural Networks & time series (R & Python) | Distributed Systems e.g. Blockchain (Bitcoin) | Complexity Modeling

Employment

- 2015–16 ECONOMIST FELLOW | THE INTERNET SOCIETY, GENEVA
Paper on exogenous increase in availability of local language content and internet adoption, presented at EEA 2016 | Conceptualised and executed report “Promoting Local Content in Africa” presented at Africa Internet Summit, leading to Google update advertising policy to help monetise African language content.
- 2013–15 RESEARCH CONSULTANT | COGINTA, GENEVA / GUINEA
Directed a large scale representative baseline survey of Conakry (Guinea) population | Conducted analysis for Canton of Geneva commissioned survey on police victimisation
- 2014–15 RESEARCH ASSISTANT | CENTRE ON CONFLICT, DEVELOPMENT AND PEACEBUILDING
Collaborated with the “Institute Nationale du Developement Humaine” (govt. Morocco) to direct a survey on behaviour and community relations, using a Regression Discontinuity Design Identification Strategy
- 2013–14 RESEARCH ASSISTANT | CENTRE FOR FINANCE AND DEVELOPMENT, GENEVA
Developed survey design on remittances from Geneva | Redeveloped Centre’s website
- 2013–14 TEACHING ASSISTANT | THE GRADUATE INSTITUTE, GENEVA
Taught weekly Masters’ Statistics workshops | Supervised Masters’ Research Projects
- 2012 RESEARCH CONSULTANT | DUTCH DEVELOPMENT FINANCE INSTITUTE FMO, THE HAGUE
Designed and directed survey on implementation of environmental, social, and governance best practices among FMO-invested hedge funds
- 2009 RESEARCH ASSISTANT | UNIVERSITY OF GRONINGEN, NETHERLANDS
Data collection and analysis for Ministry of Economics Affairs commissioned survey on adherence of businesses to Corporate Social Responsibility code (code Tabaksblat)

Education

- 2012–16 DOCTOR OF PHILOSOPHY IN DEVELOPMENT ECONOMICS | THE GRADUATE INSTITUTE
Defence in October 2016
- 2010–12 MASTER IN QUANTITATIVE ECONOMICS AND FINANCE | UNIVERSITY OF ST. GALLEN
Studied under Piedro Veglio, former Executive Director for Switzerland to The World Bank
Presented research on rate of renewable energy adoption in Nepal, at The World Bank
- 2006–10 BSC ECONOMICS | UNIVERSITY OF GRONINGEN
- 2006–10 BA THEORETICAL PHILOSOPHY | UNIVERSITY OF GRONINGEN

Research Publications

- 2016 “Making the Next Billion Demand Access: google.co.za in Setswana” | *CFD Working Paper Series*
- 2015 “decompr: GVC decomposition in R” | *CTEI Working Paper Series*
- 2014 “Cryptocurrencies and Inflation” | *CFD Working Paper Series*

Conference Publications

- 2016 “Making the Next Billion Demand Access: The Local-Content Effect of google.co.za in Setswana” | *EEA Annual Conference 2016*
- 2013 “Urban Violence and Collective Efficacy in Karachi and Dhaka” | *Pictet Foundation / Centre for Finance and Development Conference 2013*

Software Publications

- 2016 rnn CRAN. First Recurrent Neural Network in the R language. 2014 decompr <https://cran.r-project.org/package=rnn> | multilayer Recurrent Neural Network (Deep Learning) | > 2500 downloads in 5 months
- 2015 decompr CRAN. Global Value Chain decomposition. <https://cran.r-project.org/package=decompr> | Implementation of Wang-Wei-Zhu GVC decomposition algorithm | > 6000 downloads | Used for: World Bank GVC study, VoxEU GVCs eBook, Taiwan Bureau of Statistics China-trade study
- 2015 sigmoid CRAN. Sigmoid functions (logistic, Gompertz), inverses (logit), and SoftMax <https://cran.r-project.org/package=sigmoid>
- 2015 rddtools CRAN. Framework and tools for Regression Discontinuity Design <https://cran.r-project.org/package=rddtools>
- 2015 learNN CRAN. Learn how Neural Networks work <https://cran.r-project.org/package=learNN>
- 2014 gvc CRAN. Tools for Global Value Chain analysis <https://cran.r-project.org/package=gvc>
- 2014 diagonals CRAN. Tools for manipulating fat-diagonal matrices, e.g. block matrices <https://cran.r-project.org/package=diagonals>

Other Publications

- 2014 Diagnostic Local de Sécurité 2014 de Conakry (Guinée) *Coginta*
- 2013 Diagnostic Local de Sécurité 2013 de Genève (Suisse) *Coginta*

Affiliations

Centre for Finance and Development; The Graduate Institute, Geneva

Centre on Trade and Economic Integration; The Graduate Institute, Geneva

Centre on Conflict, Development and Peacebuilding; The Graduate Institute, Geneva

The Internet Society