

*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, to be presented at EEA 2016 | Conceptualised and executed report “Promoting Local Content in Africa” presented at Africa Internet Summit | Conceptualised and executed report on Internet Adblocking Incentive Structures
- 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 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 September 2016
- 2010–12 MASTER IN QUANTITATIVE ECONOMICS AND FINANCE | UNIVERSITY OF ST. GALLEN
Presented research on rate of renewable energy adoption in Nepal, at The World Bank HQ
- 2006–10 BSC ECONOMICS | UNIVERSITY OF GRONINGEN
- 2006–10 BA THEORETICAL PHILOSOPHY | UNIVERSITY OF GRONINGEN

Research Publications

- 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` 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 study, VoxEU eBook, Taiwan Bureau of Statistics study
<https://cran.r-project.org/package=rnn> | multilayer Recurrent Neural Network (Deep Learning) | < 1000 downloads in 2 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