

# CURRICULUM VITAE GHOLAMREZA HAJARGASHT

## Personal Details

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## Academic Qualifications

Ph.D. Economics, University of Queensland, 2002-2006

M.Sc. Tehran University, Iran, 1995-1998

B.Sc. Tehran University, Iran, 1991-1995

## Awards

- John Guise Memorial Prize for being the most outstanding student in econometrics, the University of New England, 2001.
- Ranked first in a national exam to receive a scholarship to do a PhD in economics, 2000.
- Ranked first in the national test to enter Master of Agricultural Economics program, 1994.

## Current Position

- 2017-Present: Senior Lecturer, Department of Accounting Economics and Finance, Swinburne University of Technology

## Past Positions

- 2017: Senior Research Fellow, Department of Economics, University of Melbourne
- 2011- 2016: Research Fellow (Assistant Professor), Department of Economics, University of Melbourne
- *Jan 2008 – Jan 2011:* Assistant Professor of Agricultural Economics, Shiraz University (Shiraz University is one of the leading Iranian universities).

## Research Interests

- Micro-econometrics: Inequality and Poverty Measurement, Performance Measurement, Stochastic Frontiers, DEA and Index Numbers.
- Econometrics: Bayesian and Simulation Based Econometrics, Nonparametric, Panel Data, LDV Models

- Agricultural and Natural Resource Economics: Econometrics of Risk, Stochastic Dominance, Contingent Valuation, Hedonics.

### **Grants Received**

ARC Discovery Grant DP170103559, 2017-2019, amount \$270000

How Reliable are Purchasing Power Exchange Rates from the World Bank?

*Chief Investigators:* Prasada Rao, Alicia Rambaldi, Gholamreza Hajargasht.

\$10000, University of Melbourne Faculty of Business and Economics, *Centre for Business Analytics* research grant (March 2015-April 2016) for the project:

*Variational Bayes Inference for Large Vector Autoregressions*

### **Published or Accepted Papers**

- Hajargasht G. and W. Griffiths (Forthcoming), “Estimation and Testing of Stochastic Frontiers using Variational Bayes”, *Journal of Productivity Analysis*.
- Chotikapanich, D., Griffiths, W., Hajargasht, G., Karunaratne, W., & Rao, D. S. (2018). Using the GB2 Income Distribution. *Econometrics*, 6(2), 21.
- Griffiths W. and G. Hajargasht (2016), Some Models for Stochastic Frontiers with Endogeneity, *Journal of Econometrics*, 190(2), 341-348
- Rao D.S. Prasada and G. Hajargasht (2016), Stochastic Approach to Computation of Purchasing Power Parities in the International Comparison Program (ICP), *Journal of Econometrics*, 191(2), 414–425
- Hajargasht G. (2015), Stochastic Frontiers with a Rayleigh Distribution, *Journal of Productivity Analysis*, 44 (2), 199-208.
- Griffiths W. and G. Hajargasht (2015), On GMM Estimation of Distributions from Grouped Data, *Economics Letters*, 126, 122-126.
- Hajargasht G. and W. Griffiths (2013), Pareto-Lognormal Distributions: Inequality, Poverty, and Estimation from Grouped Income Data, *Economic Modelling*, 33, 593-604.
- Hajargasht G., W. Griffiths, J. Brice, D.S. Prasada Rao, and D. Chotikapanich (2012), Inference for Income Distributions using Grouped Data, *Journal of Business and Economics Statistics*, 30(4), 563-575.
- Hajargasht G. and D.S. Prasada Rao (2010), Stochastic Approach to Index Numbers for Multilateral Price Comparisons and their Standard Errors, *Review of Income and Wealth*, 56, 32-58.

- Hajargasht, G, T. Coelli, & D.S. Prasada Rao (2008), A Dual Measure of Economies of Scope, *Economics Letters*, 100(2), 185-188.

#### **Papers Submitted or under Review**

- Hajargasht G. and W. Griffiths, “Inference for Lorenz Curves”, Revise-and-Resubmit to *Econometric Reviews*.
- Hajargasht G. and D.S. Prasada Rao, “Multilateral Index Number Systems for International Price Comparisons: Properties, Existence and Uniqueness, Revised-and-Resubmit to *Journal of Mathematical Economics*.
- Hajargasht, G., Hill, R. J., Rao, D. P., & Shankar, S. (2018). “Spatial Chaining in International Comparisons of Prices and Real Incomes” (No. 2018-03). University of Graz, Department of Economics. Submitted.
- Hajargasht, G. and T Wozniak, Fast and Accurate Computation of Marginal Data Density, Submitted.

#### **Papers in Late Stages of Preparation and Presented in Conferences**

- Hajargasht G. and T. Wozniak, “Inference for Large Bayesian VARs using Variational Bayes”.
- Griffiths W. and G. Hajargasht, “GMM Estimation of Mixtures from Grouped Data, An Application to Incomes Distributions”.
- Hill P., D.S. Prasada Rao, S. Shankar and G. Hajargasht, “Distance and the Generalized EKS Approaches to Multilateral Comparisons of Prices and Real Incomes”.
- Chotikapanich D., W. Griffiths, G. Hajargasht and C. Xia, “Inequality and Poverty in Africa: Regional Updates and Estimation of a Panel of Income Distributions”.
- Hajargasht G., “Reliability of Basic Heading PPPs Based on the CPD Method”.
- Hajargasht G. and D.S. Prasada Rao, “Computation of Standard errors for Purchasing Power Parity (PPP) Exchange Rates from the International Comparison Program (ICP)”
- Griffiths W. and G. Hajargasht, “A Semiparametric Stochastic Frontier Model with Correlated Effects”
- Hajargasht G., “Nonparametric Panel Data Models using Penalized Splines.”
- Coelli T., G. Hajargasht, C. Knox Lovell, “Econometric Estimation of an Input Distance Function in a System of Equations”.

## **Work under Progress**

Inference for Lorenz Curves with Individual Data  
Inference for Income Distributions with Heavy Tails  
Some Models with Heteroskedasticity using Variational Bayes  
Fast and Accurate Computation of Marginal Likelihood using Variational Bayes  
Flexible Estimation of Stochastic Frontier Models

## **Teaching Experience**

*At Melbourne University*

Quantitative Decision Making 2 (Postgraduate course)  
Quantitative Methods 2 (A major undergraduate course with more than 700 students and 10 tutors)

*At Shiraz University:*

Agricultural Decision Analysis (PhD)  
Sampling Techniques (Postgraduate)  
Advanced Development Economics (Postgraduate)  
Development Economics (Undergraduate)  
Mathematical Economics (Undergraduate)  
Research Methods (Undergraduate)  
English for Students of Economics (Undergraduate)

## **Supervision Experience**

I have been a member of dissertation committee for 3 Master Student.

I am currently Principal Supervisor of a PhD Student

## **Services:**

A Founding Member of BAM-RG (Bayesian Analysis and Modelling Research Group) at Melbourne University

A Founding Member and current chair of CPI-RG (Cost of Living, Productivity and Inequality Research Group) at Swinburne University of Technology

Contribution in organising Melbourne Bayesian Workshop

Organizing Department of Economics Brown Bag Seminar Series 2013-2014

ARC Discovery Project Assessor

### **Conference/Seminar Presentations since 2013**

- 1- Stochastic Frontiers Using Transformation to Normal, Invited Presentation in the 2nd International Conference on Econometrics and Statistics (EcoSta 2018) that will take place at the City University of Hong Kong, Hong Kong 19-21 June 2018.
- 2- Invited Speaker in 2017 CEPA International Workshop on Performance Analysis: Theory and Practice, University of Queensland, 2-3 November,
- 3- Invited discussant in the 30th PhD Conference in Business and Economics hosted by the Department of Economics at The University of Melbourne on 1-3 November, 2017 of a paper titled “Robust Bayesian Exponentially Tilted Empirical Likelihood”. For further information please see <http://fbe.unimelb.edu.au/conferences/phd-conference>.
- 4- Invited Discussant of “Non-linear time-varying stochastic frontier model” by Kelly Trinh, PhD conference, Perth, Nov, 2016.
- 5- Flexible Productivity Analysis, Invited Presentation at Society for Economic Measurement Conference, Thessaloniki, Greece, July 2016.
- 6- Inference for Lorenz Curves, Invited Presentation at Griffith University, Australia, 22 April 2016.
- 7- Fast and Accurate Computation of Marginal Likelihood, Invited Presentation at University of Queensland, Australia, 21 April 2016.
- 8- Inference for Lorenz Curves, Invited Presentation at AETE Workshop, University of Queensland, Australia, 26 Nov 2015.
- 9- How to Estimate Lorenz Curves, Invited Seminar, University of Western Australia, 23 Oct 2015.
- 10- Discussant of “The Effects of R&D on Agricultural Productivity of Australian Broadacre Agriculture: A Semiparametric Smooth Coefficient Approach by Farid Uddin Khan, PhD Conference, Monash University, Oct 2014.
- 11- Inference for Large Bayesian VARs using Variational Bayes, Presented in an Invited Session, Australian Statistical Society Conference, Sydney, July 2014.
- 12- Stochastic Approach to Computation of Purchasing Power Parities in the International Comparison Program (ICP), ESAM, Hobart, July 2014.
- 13- Flexible Productivity Analysis, Asia-Pacific Productivity Conference, UQ, July 2014.
- 14- A Semiparametric Stochastic Frontier Model with Correlated Effects, Presented in an Invited Session, Asia-Pacific Productivity conference, UQ, July 2014.
- 15- A Semiparametric Stochastic Frontier Model with Correlated Effects, UQ Productivity and Econometrics Workshop, Brisbane, Oct 2013.
- 16- Nonparametric Panel Data Models with Penalized Splines, Monash Economics Seminar Series, Melbourne, August 2013.

17- Estimation and Testing of Stochastic Frontier Models using Variational Bayes , ESAM 2013, Sydney, July 2013.

18- Estimation and Testing of Stochastic Frontier Models using Variational Bayes, EWEPA 13, Helsinki, June 2013

*This paper was selected as one of the 3 most interesting papers and was presented in a plenary session in the conference.*

19- Estimation and Forecasting of Large Bayesian VARs using Variational Bayes, ANU Macro Seminar Series, Canberra, May 2013

20- Nonparametric Panel Data Models using Penalized Splines, FBE Time Series Econometrics Workshop, Melbourne, May 2013.

21- Estimation and Forecasting of Large Bayesian VARs using Variational Bayes, UQ CEPA Seminar Series, Brisbane, April 2013.

### **Computer Programs:**

I have worked with most econometric software including EViews, STATA, LIMDEP, R, MATLAB and have developed computer code for a number of models in my papers. Some of the Code are publicly available on [my website](#) and others have been provided to the researchers upon their request. Some are listed below:

- MATLAB programs for GMM estimation of income distributions.
- R programs for a variety of nonparametric panel data models.
- R & MATLAB Code for a variety of models with Variational Bayes
- MATLAB Code for method of moments inference for PPPs.

### **Refereeing Activity:**

*Journal of Econometrics, Journal of Applied Econometrics, Journal of Business and Economics Statistics, Review of International Economics, Econometric Reviews, European Journal of Operation Research, Journal of Mathematical Economics, Journal of Productivity Analysis, Review of Income and Wealth, American Journal of Agricultural Economics, European Review of Agricultural Economics, Journal of Agricultural Economics*

### **Membership**

Econometric Society

Society for Economic Measurements

Fellow of Center for Business Analytics of Melbourne University

Member of Bayesian Analysis and Modeling Research Group (BAMRG)

American Economic Associations

The Statistical Society of Australia

## References

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