Vsevolod Iakovlev

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Education

PhD, Economics   Edinburgh, UK

Heriot-Watt University, Centre for Social and Economic Data Analytics   *September 2021 – September 2025*

- Dissertation: Essays on labour mismatch with applications of machine learning
- Supervisors: Prof Cristina Tealdi, Dr Rachel Forshaw, Dr Erkal Ersoy
- Annual Reviewers: Prof Arnab Bhattacharjee, Prof Mark E. Schaffer

MSc, Economics   Edinburgh, UK

University of Edinburgh, Scottish Graduate Programme in Economics   *September 2020 – August 2021*

- Focus on microeconomics, econometrics, labour economics, applied microeconometrics
- Dissertation on the effect of tuition fees on labour mismatch in the UK; supervised by Prof Keith A. Bender

MA (Hons), Economics with Management Science   Edinburgh, UK

University of Edinburgh   *September 2016 – May 2020*

- Focus on mathematical economics, microeconomics, econometrics, dynamic programming, operational analysis
- Dissertation on the revealed preferences theory and college admissions; supervised by Prof Simon Clark

Research Experience

PhD Research (selected projects)   Edinburgh, UK

Heriot-Watt University   *September 2021 – Present*

- Designed a measurement framework providing labour mismatch with a foundation in stable matching theory
- Built two labour market simulations allowing to recreate the conditions facilitating labour mismatch
- Developed a Python script integrating stacked double-debiased machine learning with sample weight correction
- Contributed to multi-institutional research collaborations

Research Assistant   Edinburgh, UK

Heriot-Watt University   *March 2022 – June 2023*

- *Statistical Review of World Energy 2022, 2023 (CEERP)*
  Processed and analysed data on countries' natural gas and oil supply and demand using MS Excel and Access. Worked in collaboration with colleagues from BP and the Energy Institute.
- *Current Population Survey datasets matching*
  Developed R scripts to track and match respondent IDs across 33 years of CPS data, improving panel continuity and data reliability

Industry Experience

Analyst Intern   Edinburgh, UK

IC Select   *June 2020 – August 2020*

- Built an MS Access database to centralise fiduciary manager selection data.
- Conducted an analysis of fiduciary managers' reports and presented findings to the team.

Activity Leader   Edinburgh, UK

Fettes Centre for Language and Culture   *July 2017, July 2018*

- Supervised students on campus, led project sessions and excursions, organised summer camp activities

Teaching Experience

University of Edinburgh   *September 2021 – May 2024*

- SGPE Econometrics 1 (postgraduate) – Tutor
- SGPE Econometrics 1 (postgraduate) – Stata labs assistant

Heriot-Watt University   *January 2023 – May 2024*

- Econometric Methods (postgraduate) – Stata labs assistant
- The Economy (undergraduate) – Exam marker

Publications & Working Papers

Matched or Mismatched? Unpacking Gender Mismatch Gaps with Machine Learning with C. Tealdi (2025), Available at SSRN.

Skill vs. education types of labour mismatch and their association with earnings (2024), Available at Accountancy, Economics, and Finance Working Papers

Using machine learning methods to estimate the gender wage gap with R. J. Forshaw, M. E. Schaffer, C. Tealdi (2024), Machine Learning for Econometrics and Related Topics (pp. 109-129). Cham: Springer Nature Switzerland.

An introduction to stacking regression for economists with A. Ahrens, E. Ersoy, H. Li and M. E. Schaffer (2022), International Conference of the Thailand Econometrics Society (pp. 7-29). Springer, Cham.

Conference Presentations

2025	SGPE Residential Conference	Crieff, UK
2024	Workshop on Frontiers of Macro – Labour Economics	Edinburgh, UK
	Scotland and Northern England Conference in Applied Microeconomics	Crieff, UK
	SGPE Residential Conference	Crieff, UK
2023	SGPE Residential Conference	Crieff, UK

Code

`toysimlm` – Python implementation of a simple microsimulation of labour mismatch based on a static interpretation of the two-sided matching model

`dap_mrs` – Python implementation of the deferred acceptance procedure designed to compute an applicant-optimal assignment using agents' characteristics and their counterparts' marginal rate of substitution

`mismatch_toolbox` – Python implementation of multiple approaches for computing educational and skill mismatch using data from the 1st Cycle of the Survey of Adult Skills (PIAAC)

Skills

Programming: Python (pandas, NumPy, Matplotlib, scikit-learn, DoubleML), Stata, R, MATLAB

Tools: Git, Excel, MS Access, GAMS, LaTeX

Methods: Economic modelling, econometrics, machine learning, causal inference, simulation modelling

Datasets: PIAAC, LFS, CPS, energy data

Languages: Russian (native), English (fluent)

Workshops & Training

Treatment Effects and Machine Learning	Oxford, UK
University of Oxford	*September 2022*
Machine Learning for Economists	St Andrews, UK
University of St Andrews	*August 2022*

Leadership & Volunteering

Jiu Jitsu Instructor	Edinburgh, UK
James Gillespie's High School, Edinburgh University Jiu Jitsu Club	*September 2021 – Present*

- Volunteered to lead junior and university-level jiu jitsu sessions; certified instructor under the Jiu Jitsu Foundation

Team Captain and Wellbeing Officer	Edinburgh, UK
Edinburgh University Judo Club	*April 2024 – April 2025*

- Provided support for the university judo team and helped to organise the travel logistics

Co-Founder and Treasurer	Edinburgh, UK
ScotQuan	*March 2019 – May 2020*

- Co-founded a student-led data-consulting social enterprise, and managed its finances and business development

Awards

First Place Award for SGPE Econometrics Project	*May 2021*
Fettes Centre for Language and Culture Staff Above and Beyond Award	*July 2018*