

PERSONAL
INFORMATION

Pantelis Karapanagiotis

✉ p.karapanagiotis@rug.nl

ORCID [0000-0001-9871-1908](https://orcid.org/0000-0001-9871-1908)

🔗 [Google Scholar](#) [bl1bbVgAAAAJ](https://scholar.google.com/citations?hl=nl&user=bl1bbVgAAAAJ)

🐙 [Github](#) [pi-kappa-devel](https://github.com/pi-kappa-devel)

A Mathematical Microeconomist

CURRENT
AFFILIATIONS

Jul 2024 .. present **Postdoctoral Researcher**

University of Groningen (Department of Operations)
EU Projects AI4Work and HumAlne
Groningen, The Netherlands

Jul 2021 .. present **Research Affiliate**

Leibniz Institute for Financial Research SAFE
Frankfurt am Main, Germany

EDUCATION

Oct 2015 .. Dec 2020 **Ph.D. in Quantitative Economics**

Graduate School of Economics Finance and Management
Frankfurt am Main, Germany

- Thesis: Essays in Behavioral Industrial Organization and Finance.
- Supervisors: Uwe Walz and Matthias Blonski.

Oct 2015 .. Mar 2019 **M.Sc. in Quantitative Economics**

Graduate School of Economics Finance and Management
Frankfurt am Main, Germany

- Thesis: Asset pricing with overlapping generations.

Mar 2011 .. Nov 2014 **Ptychio (4-year undergrad.) in Mathematics**

National and Kapodistrian University of Athens - Department of Mathematics
Athens, Greece

- Research Traineeship: Editing **notes on differential geometry**.
- Scholarship: Exchange year at **Ludwig Maximilians University Munich - Department of Mathematics**.

Sep 2006 .. Jan 2008 **M.Sc. in Economic Theory**

Athens University of Economics and Business - Department of Economics
Athens, Greece

- Traineeship: Editing **notes on differential geometry**.
- Thesis: Discrete state space estimation.

Sep 2002 .. Sep
2006

Ptychio (4-year undergrad.) in International Economics

Athens University of Economics and Business - Department of International and European Economic Studies

Athens, Greece

- Thesis: Participants' Behavior in London's stock exchange using microstructure data.
- Research Traineeship: Assisted in research on bilateral trade between Greece, Israel and Palestine.

PREVIOUS AFFILIATIONS

Jul 2021 .. Jul 2024

Assistant Professor

EBS University (Group of Economics and Philosophy)

Wiesbaden, Germany

Nov 2016 .. Apr 2021

Research Assistant

Goethe University (Department of Management and Microeconomics)

Frankfurt am Main, Germany

- Participation in the EurHisFirm project on behalf of SAFE's data center.
- Member of EurHisFirm's Working Group for Identification and Standards.

Aug .. Dec 2018 &
Nov .. Dec 2019

External Lecturer

EBS University of Business and Law

Wiesbaden, Germany

Mar .. Jul 2006

Student Assistant

Institute of International Economic Relations

Athens, Greece

- Project: Bilateral trade between Greece, Israel, and Palestine.

RESEARCH VISITS

Feb .. Apr 2020

Visiting Researcher

Paris School of Economics

Theodor-W.-Adorno-Platz 4, 60323 Frankfurt am Main, Germany

- EurHisFirm infrastructure collaboration; supervised by Angelo Riva.

GRANTS AND FUNDING

- 1 Deutsche Forschungsgemeinschaft Grant: *Entity Matching with Similarity Encoding. A Supervised Learning Recommendation Framework for Linking (Big) Data (Project: 539465691)*. Infrastructure Priority Program: New Data Spaces for the Social Sciences (SPP 2431), July 2024 .. July 2027. <https://www.new-data-spaces.de>.

- 2 EBS Research Fund: *Face Reading Technology: Improving Preference Prediction from Self-Reports Using Micro Expressions*. Seed funding, May 2023.
- 3 SAFE Research Fund: *An Extensible Model for Historical Financial Data with an Application to German Company and Stock Market Data*. Seed funding, Jan 2020.

ACADEMIC SERVICE

- 4 Reviewer: *Annual Reviews in Control*. 2024. <https://www.sciencedirect.com/journal/annual-reviews-in-control>.
- 5 Reviewer: *5th IFAC Workshop on Cyber-Physical and Human Systems*. 2024. <https://www.cphs2024.org/>.

WORKING PAPERS

- 6 Krause, F., K. Talke, P. Karapanagiotis, and M. Frermann: "Understanding Design Styles: Development of a Characterization and an AI-Based Automatic Picture Classification Application". N.d.
- 7 Karapanagiotis, P. and M. Liebald: "Entity Matching with Similarity Encoding: A Supervised Learning Recommendation Framework for Linking (Big) Data". SAFE Working Paper Series (No. 398). 2023. DOI: 10.2139/ssrn.4541376.
- 8 Karapanagiotis, P., F. Krause, and J. Krick: "Face Reading Technology: Improving Preference Prediction from Self-Reports Using Micro Expressions". N.d.
- 9 Karapanagiotis, P.: "The Assessment of Market-Clearing as a Model Selection Problem". N.d.(b). DOI: 10.2139/ssrn.3525622.
- 10 Heller, D., P. Karapanagiotis, and Ø. A. Nilsen: "Small and Vulnerable? Financial Constraints during Economic Crises". N.d.

JOURNAL ARTICLES

- 11 Karapanagiotis, P. and P. Reimers: *Why does the Schooling Gap Close while the Wage Gap Persists across Country Income Comparisons?* In: *Journal of Economic Dynamics and Control* 159 (Feb. 2024). DOI: 10.1016/j.jedc.2023.104805.
- 12 Karapanagiotis, P.: *The R Package markets: Estimation Methods for Markets in Equilibrium and Disequilibrium*. In: *Journal of Statistical Software* 108.2 (Feb. 2024), pp. 1–39. DOI: 10.18637/jss.v108.i02.
- 13 Gram, D., P. Karapanagiotis, M. Liebald, and U. Walz: *Design and Implementation of a Historical German Firm-level Financial Database*. In: *Journal of Data and Information Quality* 14.3 (Sept. 2022). DOI: 10.1145/3531533.

BOOK CHAPTERS

- 14 König, W., M. Frank, J. Braswell, L. Ranft, and P. Karapanagiotis: "How to Ensure Collective Action in Multinational Projects: Insights from the EurHisFirm Project". In: *Digitalization Across Organizational Levels: New Frontiers for Information Systems Research*. Ed. by D. Jens, J. Förderer, K. Thomas, R. Franz, and K. Spohrer. Gewerbestr. 11, 6330 Cham, Switzerland: Springer International Publishing, Nov. 2022, pp. 41–77. DOI: 10.1007/978-3-031-06543-9_3.

CONFERENCE PAPERS AND PROCEEDINGS

- 15 Karapanagiotis, P., F. Koester, and C. Emmanouilidis: “An Ontology Framework for Human-Robot Interoperability in Dynamic Construction Environments”. In: *IN4PL 2024 Proceedings*. (Forthcoming).
- 16 Adam, S., J. Annaert, F. Buelens, B. B. Couasnon, B. Cule, A. de Vicq, C. Guerry, P.-C. Hautcoeur, T. Paquet, A. R. Camacho, I. L. Floch, A. Lemaitre, P. Karapanagiotis, J. Poukens, and A. Riva: “Data extraction and matching: The EurHisFirm experience”. In: *Methodological Advances in the Extraction and Analysis of Historical Data* (Kellogg School of Management - Northwestern University). Dec. 2021. <https://hal.archives-ouvertes.fr/hal-03828381>.
- 17 Gram, D., P. Karapanagiotis, J. Krzyzanowski, M. Liebald, and U. Walz: “An Extensible Model for Historical Financial Data with an Application to German Company and Stock Market Data”. In: *ICTeSSH 2021 Proceedings*. July 2021. DOI: 10.21428/7a45813f.553a9b40.

TECHNICAL REPORTS

- 18 Ranft, L. M., P. Karapanagiotis, J. Braswell, and W. König: *Updated Technical Document on the Preliminary Data Model*. Tech. rep. EurHisFirm Deliverable 5.4, Apr. 2021. DOI: 10.5281/zenodo.4724802.
- 19 Karapanagiotis, P.: *Technical Document on Preliminary Common Data Model*. Tech. rep. EurHisFirm Deliverable 5.2, Feb. 2020. DOI: 10.5281/zenodo.3686930.
- 20 Karapanagiotis, P.: *Technical Document on National Data Models*. Tech. rep. EurHisFirm Deliverable 5.1, Nov. 2019. DOI: 10.5281/zenodo.3467926.

PH.D. THESIS

- 21 Karapanagiotis, P.: “Essays on Behavioral Industrial Organization and Finance”. PhD thesis. Johann Wolfgang Goethe-University Frankfurt am Main, May 2021.

OPEN SOURCE SOFTWARE

- 22 Karapanagiotis, P. and M. Liebald: *Neer Match: NEuro-symbolic Entity Reasoning and Matching*. Version 0.7.6. Forthcoming. Available on request.
- 23 Karapanagiotis, P. and P. Reimers: *structural-schooling: Gender Labor Biased Technological Change with Schooling*. Version JEDC. Replication code. source:<https://github.com/pi-kappa-devel/structural-schooling>. 2023.
- 24 Karapanagiotis, P.: *markets: Estimation Methods for Markets in Equilibrium and Disequilibrium*. Version 1.1.5. R package. source:<https://github.com/pi-kappa-devel/markets> docs:<https://markets.pikappa.eu/>. 2021. <https://cran.r-project.org/package=markets>.
- 25 Karapanagiotis, P.: *rad: Radial Attention Model*. Version 1.4.0. Replication code. source:<https://github.com/pi-kappa-devel/rad> docs:<https://rad.pikappa.eu/>. July 2019. DOI: 10.5281/zenodo.3353647.

PROPRIETARY SOFTWARE

- 26 Karapanagiotis, P.: *Resolution*. Version 3.1.2. May 2010 .. Jun 2013 - not maintained.

CONTRIBUTIONS TO OPEN SOURCE PROJECTS

- 27 Modi, K.: *ox-hugo: A carefully crafted Org exporter back-end for Hugo*. Contributed use case. Oct 2022.

- 28 Gomolka, M.: *sdclLog: Tools for statistical disclosure control in research data centres*. Patch to allow setting the `sdcl_log` environment. Jul 2021.

CONFERENCES

- 29 “An Ontology Framework for Human-Robot Interoperability in Dynamic Construction Environments”. In: *5th IFAC/INSTICC International Conference on Innovative Intelligent Industrial Production and Logistics*. Porto, Nov 21st .. 22nd, 2024.
- 30 “Understanding the Co-Existence of Design Styles: Theory Development and Algorithm-Based Picture Recognition”. In: *Journal of Marketing Virtual Symposium: Marketing Impact with Research-Driven Apps*. Virtual, Oct 20th, 2023.
- 31 “Face Reading Technology: Improving Preference Prediction from Self-Reports Using Micro Expressions”. In: *Technology, Innovation, and Entrepreneurship*. Frankfurt am Main, Sep 21st .. 22nd, 2023.
- 32 Nilsen, Ø. A.: “Small and Vulnerable? Financial Constraints during Economic Crises”. In: *RES and SES Annual Conference*. Glasgow, Apr 3rd .. 5th, 2023.
- 33 Liebald, M.: “A Historical Firm-Level Database: A Data Model and the Issue of ID Linking”. In: *The 19th World Economic History Congress*. Paris, Jul 25th .. 29th, 2022.
- 34 Nilsen, Ø. A.: “Small and Vulnerable? Financial Constraints during Economic Crises”. In: *The 15th International Risk Management Conference*. Bari, Jul 4th .. 5th, 2022.
- 35 Annaert, J.: “Data extraction and matching: the EurHisFirm experience”. In: *Methodological Advances in the Extraction and Analysis of Historical Data*. Virtual, Dec 3rd, 2021.
- 36 “Dynamic Choice with Volitional Attention: Experience and Endogenous Narrow Framing”. In: *European Association for Research in Industrial Economics Conference*. Bergen / Virtual, Aug 27th .. 28th, 2021.
- 37 “Dynamic Choice with Volitional Attention: Experience and Endogenous Narrow Framing”. In: *European Economic Association - Econometric Society European Meeting*. Copenhagen / Virtual, Aug 23rd .. 27th, 2021.
- 38 “Small and Vulnerable? Financial Constraints during Economic Crises”. In: *The 11th RCEA Money Macro & Finance Conference*. Rimini / Virtual: The Rimini Centre for Economic Analysis, Jul 27th .. 28th, 2021.
- 39 “The R Package `diseq`: Estimation Methods for Markets in Equilibrium and Disequilibrium”. In: *useR! The R Conference*. Virtual, Jul 5th .. 9th, 2021.
- 40 “An Extensible Model for Historical Financial Data with an Application to German Company and Stock Market Data”. In: *International Conference on ICT Enhanced Social Sciences and Humanities*. Virtual, Jun 28th .. 30th, 2021.
- 41 “The Assessment of Market-Clearing as a Model Selection Problem”. In: *Warsaw 16th International Economic Meeting*. Warsaw / Virtual, Jun 24th .. 25th, 2021.
- 42 “Rational Inattention Dynamics in Stochastic Games: Coordination and Conditioning”. In: *International Association for Research in Economic Psychology - Society for the Advancement of Behavioral Economics Conference*. Virtual, Jun 10th .. 13th, 2021.
- 43 “Dynamic Choice with Volitional Attention: Experience and Endogenous Narrow Framing”. In: *International Association for Research in Economic Psychology - Society for the Advancement of Behavioral Economics Conference*. Virtual, Jun 10th .. 13th, 2021.
- 44 “Invisible Market Forces with Observable Effects”. In: *Modelling with Big Data & Machine Learning: Measuring Economic Instability*. Virtual: Bank of England, Federal Reserve Board, and King’s College London, Nov 4th .. 6th, 2020.
- 45 Nilsen, Ø.: “Small and Vulnerable? Financial Constraints during the Financial Crisis”. In: *Verein für Socialpolitik Annual Conference*. Cologne / Virtual, Sep 27th .. 30th, 2020.
- 46 “Model Selection, Estimation, and Marginal Effects for Markets in Equilibrium and Disequilibrium”. In: *Goethe University’s Microeconomics and Management Colloquium*. Kleinwalsertal, Austria, Feb 13th .. 16th, 2020.

- 47 “Costly Consideration and Dynamic Choice Set Formation”. In: *Goethe University’s Microeconomics and Management Colloquium*. Kleinwalsertal, Austria, Feb 8th .. 11th, 2018.

SEMINARS AND WORKSHOPS

- 48 “AI4Work Tools Evaluation Methodology”. In: *AI4Work General Assembly*. University of York, Sep 24th .. 26th, 2024.
- 49 “Machine Learning Record Matching with Similarity Encoding”. In: *AI/Digitalization Brownbag*. University of Groningen, May 6th, 2024.
- 50 “Face Reading Technology: Improving Preference Prediction from Self-Reports Using Micro Expressions”. In: *EBS Research Seminar*. Oestrich-Winkel, Nov 16th, 2023.
- 51 “Face Reading Technology: Improving Preference Prediction from Self-Reports Using Micro Expressions”. In: *EBS Economics Group Retreat*. Neuwied, May 7th, 2023.
- 52 “Machine Learning Record Matching with Similarity Encoding”. In: *Digitisation and OCR Workshop*. University of Groningen, May 4th, 2023.
- 53 “The Regional and Federal Dynamics of the German Debt during the First World War”. In: *Historical Big Data: Research Data and Infrastructures for Socioeconomic History and Social Sciences*. Madrid: Laureano Figuerola Institute of History, Social Sciences, Universidad Carlos III de Madrid, and EurHisFirm Consortium: Long Term Data for Europe, Dec 15th .. 16th, 2022.
- 54 “Why Does the Schooling Gap Close While the Wage Gap Persists?” In: *Organizations, Markets, and Policy Interventions*. Oestrich-Winkel: EBS University for Business and Law, Nov 9th, 2022.
- 55 “Dynamic Choice with Volitional Attention: Experience and Endogenous Narrow Framing”. In: *University of Copenhagen Seminar*. Copenhagen, Denmark, Dec 14th, 2021.
- 56 “Small and Vulnerable? Financial Constraints during Economic Crises”. In: *Fourth ERMEES Macroeconomics Workshop*. Strasbourg: University of Strasbourg, BETA research laboratory, and ERMEES research team, Dec 3rd, 2021.
- 57 “Rational Inattention Dynamics in Stochastic Games: Coordination and Conditioning”. In: *EBS Economics and Philosophy Seminar*. Wiesbaden, Germany, Jun 1st, 2021.
- 58 “Small and Vulnerable? Financial Constraints during the Financial Crisis”. In: *SAFE Brown Bag Seminar*. Frankfurt am Main, Germany, Nov 25th, 2020.
- 59 “Invisible Market Forces with Observable Effects”. In: *SAFE Brown Bag Seminar*. Frankfurt am Main, Germany, Oct 28th, 2020.
- 60 “Dynamic Choice with Volitional Attention”. In: *Management and Microeconomics Brown Bag Seminar*. Frankfurt am Main, Germany, Jul 9th, 2020.
- 61 “Costly Consideration and Dynamic Choice Set Formation”. In: *Joint Macro-Finance Seminar*. Kleinwalsertal, Austria: Goethe University Frankfurt and Johannes Gutenberg University of Mainz, Jul 9th, 2020.

TEACHING

Courses

Goethe Business School

Frankfurt am Main, Germany

– Coding and Data Visualization, M.Sc.

Winter Semester 2024-25 (Forth.)

EBS University

Wiesbaden, Germany

- Strategic Interactions in Markets, M.Sc. Fall Term 2023
- Economics of the Market, B.Sc. Fall Terms 2021 .. 2023
- Managerial Economics Part I, M.Sc. Fall Term 2022
(Game Theory and Industrial Organization)
- Supportive Quantitative Methods, B.Sc. Summer Terms 2022 .. 2024
- Managerial Economics Part II, M.Sc. Fall Term 2021
(Incentive Theory)

Goethe University

Frankfurt am Main, Germany

- Real Analysis, pre-semester Ph.D. Winter Semester 2017-18

Tutorials**EBS University**

Wiesbaden, Germany

- Managerial Economics Part II, M.Sc. Fall Terms 2018, 2019
(Incentive Theory)
- Managerial Economics Part I, M.Sc. Fall Term 2018
(Game Theory)

Goethe University

Frankfurt am Main, Germany

- Management of Business Processes, M.Sc. Summer Semester 2020
- Advanced Microeconomics I Part II, Ph.D. Winter Semester 2018-19
(General Equilibrium)
- Advanced Microeconomics II Part II, Ph.D. Summer Semesters 2017, 2018
(Game Theory)
- Competition Economics, M.Sc. Summer Semester 2017

**PROFESSIONAL
EXPERIENCE**May 2010 .. Jun
2013**Sole Proprietorship****Software Engineering, Financial Reporting**

Athens, Greece

- Design and development of database-driven financial and reporting services for small private and official sector organizations.
- Developed business management software (Resolution), accounting, clientele, and supplier databases.

Aug 2009 .. May
2010**Communication Center of 13th Special Operation Administration****Cryptographic Communication Department (Military Service)**

Athens, Greece

- Administrative support.

Jul 2008 .. Sep 2008

Business Intelligence Engineering Internship**Relational**

Athens, Greece

- Storage, management, and utilization of relational databases. Financial reporting.

PERSONAL SKILLS

Mother tongue Greek

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	C1	C1	C1	B2	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user

[Common European Framework of Reference for Languages](#)

Digital competences

	SELF-ASSESSMENT				
	Information Processing	Communication	Content creation	Safety	Problem solving
	Level 6	Level 5	Level 5	Level 6	Level 6

[Digital competences - Self-assessment grid](#)

Digital skills

- Programming
 - Experienced: C (\leq std17), C++ (\leq std21), Emacs Lisp (30.*).
 - Working Knowledge: java
- Scripting
 - Experienced: Python (3.*), R (4.*), MATLAB/Octave.
 - Beginner: Stata
- Typesetting
 - Experienced: \LaTeX , tikz/pgf, Quarto
- Web
 - Experienced: JavaScript (\leq ES2023).
 - Working Knowledge: PHP (8.*), Typescript
- Databases
 - Experienced: MySQL/MariaDB, PostgreSQL, SQLite.
 - Working Knowledge: Oracle SQL, Ms. SQL server.
- APIs & Libraries
 - Experienced: TensorFlow, Keras, open-mpi, MySQL C API, libpq (PostgreSQL C API), pthreads, Drupal 9, plotly js, reveal js.
 - Working Knowledge: Hugo.