# Tadas Temčinas

#### Education

<ul> <li>PhD Statistics, University of Oxford, Oxford, UK.</li> <li>Supervisors: Prof. Gesine Reinert and Prof. Vidit Nanda.</li> <li>Working on probability theory and topological data analysis.</li> <li>Over 70 contact hours of teaching at undergraduate and graduate levels.</li> </ul>
<ul> <li>MMathPhil Mathematics and Philosophy, University of Oxford, Oxford, UK.</li> <li>Thesis: Topological Tools in Data Analysis</li> </ul>
High School Diploma, Vilnius Lyceum, Vilnius, Lithuania. Work Experience
<ul> <li>Machine Learning Engineer, <i>PolyAI</i>, London, UK.</li> <li>Tech stack: Python: Tensorflow, Scikit-learn, Numpy;</li> <li>Implemented, deployed and automatically tested a slot-value parsing service.</li> <li>Developed, researched and implemented efficient intent detection models using pre-trained encoders.</li> <li>Designed and implemented POC for a voice-based chatbot building platform that combines rule-based policy with machine learning solutions for intent detection and slot-value extraction.</li> </ul>
<ul> <li>Machine Learning Engineer, <i>Digital Genius</i>, London, UK.</li> <li>Tech stack: Python: PyTorch, Scikit-learn, Numpy, Pandas, Spacy, Plotly;</li> <li>Built named-entity recognition service from research to production.</li> <li>Built a common framework for model training and evaluation.</li> <li>Worked on improving intent detection models.</li> </ul>
<ul> <li>Data Engineering Intern, <u>Ueni Limited</u>, London, UK.</li> <li>Tech stack: Python: Pandas, Django, Gensim, Plotly; Google BigQuery; SQL; JavaScript</li> <li>Researched possible topic modelling tools to improve existing service search.</li> <li>Developed both backend and frontend for scalable web-based dashboards and automated reporting.</li> </ul>

### Tech & Language Skills



C2 • • • • • Lithuanian, English
B2 • • • • Russian
B1 • • • • Polish
A1 • • • • Mandarin, Hebrew

## Preprints and Publications

- 2022 **Topological Analysis of Credit Data: Preliminary Findings**, James Cooper, Peter Mitic, Gesine Reinert, Tadas Temčinas, <u>IDEAL 2022</u>.
- 2022 Principles and Consequences of Evolutionary 'Omic Development: a Topological Perspective, Lyuba Bozhilova, Peter Grindrod, Gesine Reinert, Tadas Temčinas, <u>ResearchGate</u>.
- 2021 Multivariate Central Limit Theorems for Random Clique Complexes, Tadas Temčinas, Vidit Nanda, Gesine Reinert, arXiv:2112.08922.
- 2020 Efficient Intent Detection with Dual Sentence Encoders, Iñigo Casanueva, Tadas Temčinas, Daniela Gerz, Matthew Henderson, Ivan Vulić, <u>arXiv:2003.04807</u>.
- 2018 Local Homology of Word Embeddings, Tadas Temčinas, arXiv:1810.10136.

#### Achievements

2019 – 2023 EPSCR Full Scholarship, Department of Statistics, University of Oxford.

2017, 2018 Scholarship/Exhibition, St Anne's College, University of Oxford.