

Roman Kouznetsov

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| SUMMARY | I am currently a statistics PhD student at the University of Michigan doing applied deep learning research on spatial transcriptomics data modelled as graphs. My research is currently in the pre-print stages, but it is rapidly advancing and was presented and critically acclaimed at MSSISS 2022. At the moment, I am seeking opportunities for part-time employment or an internship in computer vision, deep learning, software development, and/or quantitative research. | |
| EDUCATION | University of Michigan , PhD, Statistics University of Michigan , MA, Statistics Case Western Reserve University , B.S. Statistics and Economics <i>magna cum laude</i> GPA 3.92 (Dean's List all 6 semesters, finished in 3 years) | Aug 2019 – present Aug 2019 – May 2021 May 2019 |
| PUBLICATIONS | Needs, priorities, and attitudes of individuals with spinal cord injury toward nerve stimulation devices for bladder and bowel function: a survey. <i>Spinal Cord</i> , 58 (2020) | |
| SELECTED EXPERIENCE | University of Michigan Probabilistic Machine Learning Group , Researcher Researching gene expression imputation and prediction with the use of graph convolutional (variational) autoencoders. <u>Advisor: Dr. Jeffrey Regier</u> Progressive Insurance , Data Science Intern Performed network visualization and analysis for employment transitions in Claims Control. The analysis was integrated as tool that helps Claims Control employees make staffing decisions. Case Western Reserve University , Analyst Cleaned and performed random forest classification on spinal cord injury survey data to identify how to best aid victims of SCI. Harvard University , Data Curator Created a dataset from scratch to be used for regression discontinuity analysis of home rule effect on real estate prices in Illinois. | Dec 2019 – present May 2019 – Aug 2019 Dec 2018 – May 2019 Jan – May 2018 |
| TEACHING | University of Michigan , Administrative Graduate Student Instructor (GSI) Promoted to handle and organize office hours, meeting leads, and scheduling while still maintaining teaching and grading responsibilities. University of Michigan , Graduate Student Instructor (GSI) <ul style="list-style-type: none"><u>STATS 250</u>: Introduction to Statistics and Data Analysis<u>STATS 507</u>: Data Science and Analytics using Python Hermiona Education , Academic Consultant and Tutor Consulted on math, computer science, and college applications for aspiring students in Europe. Case Western Reserve University , Educational Services for Students Tutor Student tutor in economics, chemistry, mathematics, and statistics. Tutor Rating: 2.98/3.00 (55 sessions) TRACE , Founder Founded a tutor-run academic center of excellence (TRACE), when the original service organized by teachers was shut down at Eden Prairie High School. | Jan 2022 – present Aug 2020 – Dec 2021 Aug 2020 – Aug 2021 Dec 2017 – Dec 2018 Sep 2014 – May 2016 |
| SELECTED HONORS | MSSISS 2022 Best Methodology Poster An award given to my poster “deepST: A Graph Convolutional Autoencoder for Spatial Transcriptomics” at the Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS). Michelson-Morley Scholarship A collaborative stipend from the Rackham Graduate School and the statistics graduate program given to assist graduate students with research activities | March 2022 May 2019 |
| SELECTED SKILLS | Machine Learning : neural nets, generative models, decision trees, clustering, graphical models, regression Programming Languages : Python, R, SQL, Stata, C#, C++, Java, Matlab, Mathematica Proficient Packages : Pytorch, Tensorflow, Numpy, Scipy, PyMC3, PyG, OpenCV Math : Bayesian statistics, theoretical statistics, graph theory, stochastics, linear algebra | |