Konstantinos Christopher Tsiolis

kc.tsiolis@mail.utoronto.ca | Website | LinkedIn | GitHub

PROFILE

I am a second-year Ph.D. student in Statistics at the University of Toronto and the Vector Institute under the supervision of Prof. Murat Erdogdu. I conduct research on theoretical aspects of machine learning.

EDUCATION

University of Toronto — Toronto, ON
Doctor of Philosophy (Ph.D.) in Statistics — *Sep. 2023 – Present*
- Supervisor: Prof. Murat Erdogdu
- Cumulative GPA: 4.0/4.0

McGill University — Montreal, QC
Master of Science (M.Sc.) in Mathematics and Statistics — *Jan. 2022 – Aug. 2023*
- Supervisor: Prof. Adam Oberman
- Cumulative GPA: 4.0/4.0
- Thesis Title: Contrastive Learning as Kernel Approximation

McGill University — Montreal, QC
Bachelor of Science (B.Sc.) in Honours Mathematics and Computer Science — *Sep. 2018 – Dec. 2021*
- Cumulative GPA: 3.99/4.0

PUBLICATIONS (* DENOTES EQUAL CONTRIBUTION)

Jingyi He*, **KC Tsiolis***, Kian Kenyon-Dean*, and Jackie Chi Kit Cheung. 2020. Learning Efficient Task-Specific Meta-Embeddings with Word Prisms. *Proceedings of the 28th International Conference on Computational Lingusitics*, pages 1229-1241.

RESEARCH EXPERIENCE

Undergraduate Research Assistant — Summer 2021
Mila / McGill University Department of Mathematics and Statistics — *Montreal, QC*
- Supervisor: Prof. Adam Oberman
- Developing, implementing, and testing novel approaches in knowledge distillation and self-supervised representation learning for computer vision

Undergraduate Research Assistant — Summer 2019 and 2020
Mila / McGill Reasoning and Learning Lab — *Montreal, QC*
- Supervisor: Prof. Jackie Chi Kit Cheung
- Natural language processing research on word embeddings and computational pragmatics
- Presenting my work at reading groups and conferences

TEACHING EXPERIENCE

Teaching Assistantships
- *At the University of Toronto (2023-Present):* STA314 (Statistical Methods for Machine Learning I), STA261 (Probability and Statistics II), STA221 (The Practice of Statistics II), STA130 (An Introduction to Statistical Reasoning and Data Science)
- *At McGill University (2021-2022):* MATH 222 (Calculus 3), COMP 251 (Algorithms and Data Structures)
- Experience preparing material for and running tutorials, exam review sessions, office hours, answering questions on online forums (e.g., Piazza), grading assignments and exams, and invigilation

Academic Lecturer at the McGill Artificial Intelligence Society — Mar 2020 – Apr 2021
- Volunteer role as part of a student club
- Giving lectures and writing a textbook for a student-run machine learning course
- Holding office hours and one-on-one meetings with students

Relevant Skills

Programming Languages: Python, R, Java, Bash, C, MATLAB, JavaScript, OCaml
Libraries: Tidyverse, PyTorch, NumPy, scikit-learn, pandas, Matplotlib
Comfortable with Unix/Linux command line and git

Awards

NSERC Postgraduate Scholarship – Doctoral (PGS D)   Sep. 2024 – Aug. 2027
- Award value: 40,000 CAD per year
- Awarded to outstanding Canadian students pursuing a Ph.D. in the natural sciences or engineering

Queen Elizabeth II Graduate Scholarship in Science and Technology (QEII-GSST)   Jul. 2023
- Awarded to outstanding students pursuing a Ph.D. at an Ontario university

Faculty of Arts and Science Top (FAST) Doctoral Fellowship   Jan. 2023
- 4-year fellowship awarded to outstanding Canadian Ph.D. students at the University of Toronto

FRQNT Master's (B1X) Research Scholarship   Jun. 2022
- Awarded to outstanding research M.Sc. students in Quebec
- Awarded in 2022, but funding deferred to 2023 due to NSERC award

NSERC Canada Graduate Scholarships - Master's Program (CGS M)   May 2022 – Apr. 2023
- Awarded to outstanding research M.Sc. students in Canada

Wing Hing Chan Scholarship in Science   Aug. 2021
- Awarded to an outstanding McGill student in the Faculty of Science

Alan Shaver Scholarship   Aug. 2021
- Awarded to an outstanding McGill student in the Faculty of Science

IVADO Undergraduate Introduction to Research Scholarship   May 2021 – Aug. 2021
- Funding awarded to undergraduate students pursuing summer research in data science

Anne Molson Scholarship   Aug. 2020
- Awarded to a McGill student in the Physical Sciences prior to their final year

Emily Ross Crawford Scholarhsip   Aug. 2020
- Awarded to a McGill student in the Faculty of Science based on academic achievement in the first two years

NSERC Undergraduate Student Research Award   May 2020 – Aug. 2020
- Funding awarded to undergraduate students pursuing summer research in natural sciences or engineering

John Mahon Scholarship   Aug. 2018 – Dec. 2021
- Annually renewable entrance scholarship at McGill University