

Jack Richter-Powell

(they/them)

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EDUCATION

MCGILL UNIVERSITY | JOINT HONOURS MATHEMATICS & COMPUTER SCIENCE

Montreal, Canada | September 2017 - December 2021

- GPA: 3.84
- Completed 9 courses at the graduate level (including core graduate mathematics curriculum)

PUBLICATIONS

INPUT CONVEX GRADIENT NETWORKS [JACK RICHTER-POWELL](#), JONATHAN LORRAINE, BRANDON AMOS

Accepted as spotlight submission at Neurips 2021 OTML Workshop – arXiv

- Developed a new type of implicit model for parameterizing gradients of convex functions.
- Explored connections to Brenier's theorem from Optimal Transport and pullback metrics in Riemmanian Geometry

LEARNED PRIORS FOR THE MAXIMUM ENTROPY ON THE MEAN FRAMEWORK

[JACK RICHTER-POWELL](#), RUSTUM CHOSKI

Preprint Soon

- Worked on incorporating high level feature information recovered from image datasets into the MEMM Framework

INDUSTRY EXPERIENCE

ERICSSON CANADA | DATA SCIENTIST INTERN

Montreal, Canada | January 2020 - May 2020

- Applied machine learning techniques to provide insights about nationwide cellular networks (equipment failures, utilization metrics)
- Worked with geographic databases to develop models for cellular user segmentation

AWARDS

NSERC USRA - OPTIMAL TRANSPORT NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL GRANT

- Received a federal grant to research the field of optimal transport, under supervision of Prakash Panangaden and Rustum Choksi
- Investigated new scalable computational methods for Wasserstein distances
- Explored applications to Generative Adversarial Networks (Wasserstein GAN) and Variational Auto Encoders

MISC

- Dean's Honour List - 2019, 2021
- Robert Bruce Scholarship at McGill - 2021

ACADEMIC SERVICE

- Served as a reviewer for the Neurips 2021 Optimal Transport in Machine Learning Workshop
- Served as a course assistant for Analysis 2 (MATH 255) at McGill