

EDUCATION

- 2021 - Present **M.Sc. Computer Science,**
Cornell University
- 2017 - 2020 **B.Sc. Honours Computer Science, Mathematics Minor,**
2011 - 2012 University of British Columbia, GPA: 4.30/4.33

PUBLICATIONS

- 2022 Brennan, A., R. Naidoo, **L. Greenstreet**, Z. Mehrabi, N. Ramankutty, C. Kremen. *Functional Connectivity of the World's Protected Areas*. Science, 2022. <https://doi.org/10.1126/science.abl8974>
- 2022 **Greenstreet, L.**, N.J.A. Harvey, V. Sanches Portella. *Efficient and Optimal Fixed-Time Regret with Two Experts*. ALT, 2022. <https://doi.org/10.48550/arXiv.2203.07577>
- 2021 Zhang, S., A. Afanassiev, **L. Greenstreet**, T. Matsumoto, G. Schiebinger. *Optimal transport analysis reveals trajectories in steady-state systems*. PLOS Computational Biology, 2021. <https://doi.org/10.1371/journal.pcbi.1009466>
- 2021 Li, H., J. Ezike, A. Afanassiev, **L. Greenstreet**, et al. *Single Cell Analysis Elucidates the Maturation of Human Stem and Progenitor Cell Function from Fetal through Adult Hematopoiesis*. Blood, 2021. <https://doi.org/10.1182/blood-2021-151090>
- 2021 Shahan R., C. Hsu, T.M. Nolan, B.J. Cole, I.W. Taylor, **L. Greenstreet**, et al. *A single cell Arabidopsis root atlas reveals developmental trajectories in wild type and cell identity mutants*. Developmental Cell, 2021. <https://doi.org/10.1016/j.devcel.2022.01.008>
- 2020 Massri, A.J., **L. Greenstreet**, A. Afanassiev, A. Berrio Escobar, G.M. Wray, G. Schiebinger, D.R. McClay. *Developmental Single-cell transcriptomics in the Lytechinus variegatus Sea Urchin Embryo*. Development, 2020. <https://doi.org/10.1242/dev.198614>

PREPRINTS

- 2022 **Greenstreet, L.**, A. Afanassiev, Y. Kijima, M. Heitz, S. Ichiguro, et al. *A DNA-based global positioning system—a theoretical framework for large-scale spatial genomics*. Preprint. <https://www.biorxiv.org/content/10.1101/2022.03.22.485380v1>

PRESENTATIONS

- 2020 **Greenstreet, L.**, and E. Lai. *Developing a Data-Driven Electric Vehicle Strategy in Surrey, BC*. SigKDD 2020 Social Impact Session.

AWARDS

- 2022 **Graduate Teaching Award**, Department of Computer Science, Cornell University
- 2020 **NSERC Undergraduate Summer Research Award**, Natural Sciences and Engineering Research Council of Canada (NSERC)
- 2018 **Stanley M Grant Scholarship in Mathematics**, Department of Mathematics, University of British Columbia

RESEARCH EXPERIENCE

- 05/2022 - 08/2022 **Research Assistant**, Computational Sustainability Lab, Cornell University, Ithaca, NY
- Investigating incorporating spatio-temporal information and improving the interpretability of deep species distribution models.
- 05/2020 - 08/2021 **Research Assistant**, Schiebinger Lab, Department of Mathematics, University of British Columbia
- Constructed developmental trajectories for biological systems in equilibrium using optimal transport on single-cell data
 - Designed a manifold-learning approach for optics-free spatial transcriptomics
- 09/2019 - 09/2020 **Research Assistant**, WoRCS Lab, Institute for Resources, Environment, and Sustainability, University of British Columbia
- Assisted with a global assessment of the functional connectivity of protected areas
 - Created acoustic permeability signatures to aid in the study of vocal amphibians
- 09/2019 - 05/2020 **Honours Thesis**, Algorithms Lab, Department of Computer Science, University of British Columbia
- Developed a continuous approximation to the classic learning problem of prediction with expert advice for a small numbers of experts
- 05/2019 - 08/2019 **Fellow - Data Science for Social Good Program**, University of British Columbia Data Science Institute
- Integrated six datasets and developed the database for an app helping city planners develop electric vehicle infrastructure
 - Created a model to identify and rank charging sites with an objective that incorporates both potential usage and even access to chargers

WORK EXPERIENCE

- 09/2021 - 05/2022 **Teaching Assistant**, Cornell University, Ithaca, NY
- CS 3220 FA22 - Computational Mathematics for Computer Science
 - CS 4220 SP22 - Numerical Analysis: Linear and Nonlinear Problems
- 06/2021 - 12/2021 **Consultant**, Vancouver, BC
- Helped the City of Surrey migrate the app developed during my fellowship at UBC's Data Science Institute from RShiny to PowerBI for better integration with the City's systems.
- 01/2019 - 05/2019 **Academic Assistant**, University of British Columbia Library, Vancouver, BC
- 07/2015 - 08/2017 **Information Technology Coordinator**, Tilth Alliance, Seattle, WA

COMMUNITY INVOLVEMENT

- 2022 **Volunteer**, Research Advocacy Day, Cornell
- 2020-2021 **Mentor**, Data Science for Social Good Program, UBC Data Science Institute
- 2019 **Math Tutor**, Emerging Indigenous Scholars Program, University of British Columbia
- 2014-2015 **Student Board Member**, SEED, Univ. of Washington Sustainability in Housing
- 2014-2015 **Volunteer**, University of Washington Student Farm