

EDUCATION

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

RESEARCH EXPERIENCE

05/2020 - 08/2021	Research Assistant , Schiebinger Lab, Department of Mathematics, University of British Columbia <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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 <ul style="list-style-type: none">• 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, developing an objective that incorporates both potential usage and even access to chargers

PUBLICATIONS

2021	Zhang, S., A. Afanassiev, L. Greenstreet , T. Matsumoto, G. Schiebinger. <i>Optimal transport analysis reveals trajectories in steady-state systems</i> . PLOS Computational Biology, 2021. https://doi.org/10.1371/journal.pcbi.1009466
2021	Shahan R., C. Hsu, T.M. Nolan, B.J. Cole, I.W. Taylor, L. Greenstreet , et al. <i>A single cell Arabidopsis root atlas reveals developmental trajectories in wild type and cell identity mutants</i> . 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. <i>Developmental Single-cell transcriptomics in the Lytechinus variegatus Sea Urchin Embryo</i> . Development, 2020. https://doi.org/10.1242/dev.198614

PRESENTATIONS

- 2020 **Greenstreet, L.**, and E. Lai. *Developing a Data-Driven Electric Vehicle Strategy in Surrey, BC*. SigKDD 2020 Social Impact Session.
- 2020 **Greenstreet, L.**, and E. Lai. *Maximizing Utilization of Electric Vehicle Charging Infrastructure in Surrey, BC using a Data-Driven Model*. UBC Multidisciplinary Undergraduate Research Conference.

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>
- 2021 Brennan, A., R. Naidoo, **L. Greenstreet**, Z. Mehrabi, N. Ramankutty, C. Kremen. *Functional Connectivity of the World's Protected Areas*. Preprint. <https://doi.org/10.1101/2021.08.16.456503>
- 2021 Hojun, L., J. Ezike, A. Afanassiev, **L. Greenstreet**, et al. *Hematopoiesis at single cell resolution spanning human development and maturation*. Preprint. <https://www.biorxiv.org/content/10.1101/2021.08.25.457678v1>

AWARDS

- 2020 **NSERC Undergraduate Summer Research Award**
- 2018 **Stanley M Grant Scholarship in Mathematics**

WORK EXPERIENCE

- 09/2022 - Present **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 **Independent Consultant**, City of Surrey, Vancouver, BC
- Helped 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
- Helped develop for-all-x, an open-source introductory logic textbook used in UBC's PHIL 220
- 07/2015 - 08/2017 **Information Technology Coordinator**, Tilth Alliance, Seattle, WA
- Led the integration of three non-profits' IT resources following a merger
 - Maintained three websites and took the technical lead in the website redesign process

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