Samuel Sledzieski

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EDUCATION

Massachusetts Institute of Technology — **Cambridge, MA**

MS, PhD in Computer Science — 2019 – 2024
In Progress
- Advisor: Dr. Bonnie Berger

University of Connecticut — **Storrs, CT**

BS in Computer Science — 2015 – 2019
- Minor in Molecular and Cellular Biology
- Concentration: Bioinformatics, Data Science
- Advisor: Dr. Mukul Bansal
- Magna Cum Laude, Honors Scholar

RESEARCH EXPERIENCE

Massachusetts Institute of Technology — **Cambridge, MA**

Research Assistant, Computation and Biology Group — Feb 2020 – Present

MIT Lincoln Laboratory — **Lexington, MA**

Summer Research Program, Advanced Lasercom Systems Group — May 2019 – Aug 2019

University of Connecticut — **Storrs, CT**

Undergraduate Research Assistant, Computational Biology Lab — Jan 2017 – May 2019

Software Developer, Jackson Laboratory for Genomic Medicine — Aug 2018 – May 2019

Undergraduate Research Assistant, Nelson Lab — Oct 2015 – Dec 2016

TEACHING EXPERIENCE

University of Connecticut — **Storrs, CT**

Teaching Assistant, Theory of Computation — Spring 2018

PUBLICATIONS

[5] Zaman, **Sledzieski**, Wu, Bansal, "On the reticulate evolutionary history of the SARS-CoV-2 genome," In preparation.

[4] **Sledzieski**, Singh, Cowen, Berger, "Genome-scale interactome prediction with a sequence-based, structure-aware, interpretable model," Under Review, *Cell Systems*.

[3] **Sledzieski**, Singh, Cowen, Berger, "Sequence-based prediction of protein-protein interactions: a structure-aware interpretable deep learning model," Conference on Research in Computational Molecular Biology (RECOMB) 2021.

[2] Kousi, Boix, Mathys, Park, **Sledzieski**, Bennett, Tsai, Kellis, "Single-cell mosaicism analysis reveals cell-type-specific somatic mutational burden in AD," Under Review, *Nature*.

[1] **Sledzieski**, Zhang, Mandoiu, Bansal, "TreeFix-TP: Phylogenetic Error Correction for Accurate Reconstruction of Viral Transmission Networks," Pacific Symposium on Biocomputing (PSB) 2021: Proceedings, pages 119-130.

PRESENTATIONS

Cold Spring Harbor Laboratory 2021 Meeting on Network Biology — Mar 2021

PSB 2021 - Biocomputing and AI for infectious disease modelling and therapeutics — Jan 2021

RECOMB 2019 Poster Presentation — Apr 2019

IEEE ICCABS Workshop on Computational Advances for Next Generation Sequencing — Oct 2018

UConn Fall Frontiers in Undergraduate Research — Oct 2018

University of Connecticut Bioinformatics Seminar — Mar 2018, Oct 2018

GRANTS & FELLOWSHIPS

National Science Foundation (NSF) Graduate Research Fellowship — 2021 - 2024

AWARDS

First Place, MIT Intro to Deep Learning Final Project Competition	2020
Dean's List, College of Liberal Arts and Sciences, School of Engineering	2015 – 2019
Academic Excellence Scholarship, University of Connecticut	2015 – 2019
New England Scholar, University of Connecticut	2017 – 2019
Third Place Machine Learning, United Health Group Global Hackathon	2017
Third Place Overall, HampHack	2017
Third Place Overall, HackUConn	2017
National Merit Scholarship Finalist	2014

MEMBERSHIPS & ACTIVITIES

International Society for Computational Biology (ISCB)
Institute of Electronics Engineers (IEEE)
Association for Computing Machinery (ACM)
Tau Beta Pi, Engineering Honor Society (TBII)
Eta Kappa Nu (IEEE-HKN)
Upsilon Pi Epsilon, Computer Science Honor Society (UPE)

SELECTED COURSEWORK

- **Computer Science**
  - Algorithms
  - Artificial Intelligence
  - Advanced Computational Biology
  - Computational Geometry
  - Inference and Information
  - Machine Learning
  - Software Engineering
- **Math and Statistics**
  - Calculus I & II, Multivariable Calculus
  - Statistical Methods
  - Linear Algebra
  - Optimization Methods
- **Biology**
  - Biochemistry
  - Cell Biology
  - Genetics
  - Molecular Evolution
  - Phylogenetics

[*CV compiled on 2021-05-05*]