Samuel Sledzieski

162 5th Ave, New York, NY 10010 ssledzieski@flatironinstitute.org • https://samsl.io • ©

RESEARCH	Flatiron Institute	New York, NY
	Flatiron Research Fellow, Center for Computational Biology	Sep 2024 – Present
	Princeton University	Princeton, NJ
	Visiting Research Collaborator, Lewis-Sigler Institute for Integrative Genomics	-
	Massachusetts Institute of Technology Research Assistant, Computation and Biology Group	Cambridge, MA Feb 2020 – Aug 2024
	Centre Scientifique de Monaco	Monaco
	Visiting Researcher	Jan 2024 – Feb 2024
	Serinus Biosciences	Cambridge, MA
	Consultant	Feb 2023 – Dec 2023
	Microsoft Research	Redmond, WA
	Research Intern, AI For Good Lab	May 2023 – Oct 2023
	Cellarity	Cambridge, MA
	Machine Learning Intern, Perturbation Biology Group	May 2021 – Aug 2021
	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
EDUCATION	Massachusetts Institute of Technology	Cambridge, MA
	PhD, Computer Science	2019 - 2024
	 Minor in Biological Engineering Concentration: Protein language models, protein and drug interactions, protein structure Advisor: Dr. Bonnie Berger 	
	SM, Electrical Engineering and Computer Science	2019 – 2021
	University of Connecticut	Storrs, CT
	BS, Computer Science	2015 – 2019
	 Minor in Molecular and Cellular Biology Concentration: Bioinformatics, Data Science Advisor: Dr. Mukul Bansal Magna Cum Laude, Honors Scholar 	
TEACHING	Massachusetts Institute of Technology	Cambridge, MA
	Teaching Assistant, Intro to Deep Learning (6.S191)	Winter 2021, 2022, 2023
	Teaching Assistant, Machine Learning in Genomics (6.878)	Fall 2021
	University of Connecticut	Storrs, CT
	Teaching Assistant, Theory of Computation	Spring 2018

JOURNAL

- [9] Kshirsagar, Meller, Humphreys, **Sledzieski**, Xu, Dodhia, Horvitz, Berger, Bowman, Lavista Ferres, Baker, Baek, "Rapid and accurate prediction of protein homo-oligomer symmetry," *Nature Communications*, 16(2017), 2025.
- [8] Singh, Im, Qiu, Macnkess, Gupta, Sorenson, Sledzieski, Erlach, Wendt, Nanfack, Bryson, Berger, "Learning the Language of Antibody Hypervariability," *Proceedings of the National Academy of Sciences*, 122(1):e2418918121, 2024.
- [7] **Sledzieski**, Kshirsagar, Baek, Berger, Dodhia, Lavista Ferres, "Democratizing Protein Language Models with Parameter-Efficient Fine-Tuning," *Proceedings of the National Academy of Sciences*, 121(26):e2405840121, 2024.
- [6] **Sledzieski***, Devkota*, Singh, Cowen, Berger, "TT3D: Leveraging Pre-Computed Protein Sequence Models to Predict Protein-Protein Interactions," *Bioinformatics*, 39(11):btad663, 2023.
- [5] Singh*, **Sledzieski***, Bryson, Cowen, Berger, "Contrastive learning in protein language space predicts interactions between drugs and protein targets," *Proceedings of the National Academy of Sciences*, 120(24):e2220778120, 2023.
- [4] Kumar, Brenner, **Sledzieski**, Olaosebikan, Lynn-Goin, Putnam, Yang, Lewinski, Singh, Daniels, Cowen, Klein-Seetharaman, "Transfer of knowledge from model organisms to evolutionarily distant non-model organisms: The coral Pocillopora damicornis membrane signaling receptome," *Plos one*, 18(2):e0270965, 2023.
- [3] Zaman*, **Sledzieski***, Wu, Bansal, "virDTL: Viral recombination analysis through phylogenetic reconciliation and its application to sarbecoviruses and SARS-CoV-2," *J Comput Biol*, 30(1):3–20, 2023.
- [2] Singh*, Devkota*, **Sledzieski**, Berger, Cowen, "Topsy-Turvy: integrating a global view into sequence-based PPI prediction," *Bioinformatics*, 38(Supplement 1):i264-i272, 2022.
- [1] **Sledzieski***, Singh*, Cowen, Berger, "D-SCRIPT translates genome to phenome with sequence-based, structure-aware, genome-scale predictions of protein-protein interactions," *Cell Systems*, 12(10):969-982, 2021.

CONFERENCE AND WORKSHOPS

- [6] Sledzieski, Versavel, Singh, Ocitti, Devkota, Kumar, Shhpilker, Roger, Yang, Lewinski, Putnam, Berger, Klein-Seetharaman, Cowen, "Decoding the Functional Interactome of Non-Model Organisms with PHILHARMONIC," Conference on Research in Computational Molecular Biology (RECOMB), 2024.
- [5] **Sledzieski**, Kshirsagar, Baek, Berger, Dodhia, Lavista Ferres, "Parameter-Efficient Fine-Tuning of Protein Language Models Improves Prediction of Protein-Protein Interactions," *Machine Learning for Structural Biology Workshop at NeurIPS*, 2023.
- [4] **Sledzieski***, Singh*, Cowen, Berger, "Contrasting drugs from decoys," *Machine Learning for Structural Biology Workshop at NeurIPS*, 2022.
- [3] **Sledzieski***, Singh*, Cowen, Berger, "Adapting Protein Language Models for Rapid Drug-Target Interaction Prediction," *Machine Learning for Structural Biology Workshop at NeurIPS*, 2021.
- [2] **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.
- [1] **Sledzieski***, Zhang, Mandoiu, Bansal, "TreeFix-TP: Phylogenetic Error Correction for Accurate Reconstruction of Viral Transmission Networks," *Pacific Symposium on Biocomputing (PSB)*, 2021.

PREPRINTS

- [3] Ullanat, Jing, **Sledzieski**, Berger, "Learning the language of protein-protein interactions," *bioRxiv*, 2025. 10.1101/2025.03.09.642188v1.
- [2] Vizgaudis, Kumar, Olaosebikan, Roger, Brenner, **Sledzieski**, Yang, Lewinski, Singh, Daniels, Cowen, Klein-Seetharaman, "Insulin Signaling and Pharmacology in Corals," *Authorea Preprints*, 2024. 10.22541/au.170666200.07483513/v1.
- [1] Kousi, Boix, Park, Mathys, **Sledzieski**, Peng, Bennett, Tsai, Kellis, "Single-cell mosaicism analysis reveals cell-type-specific somatic mutational burden in Alzheimers Dementia," *bioRxiv*, 2022. 10.1101/2022.04.21.489103.

Biophysical Society Annual Meeting (BPS) Intelligent Systems for Molecular Biology (ISMB) Intelligent Systems for Molecular Biology (MI SR) Workshop at NeurIPS Archite Learning in Structural Biology (MI SR) Workshop at NeurIPS Research on Computational Molecular Biology (RECOMB) Research on Computational Molecular Biology (RECOMB) Apr 2019, May 2022, Apr 2025 Pacific Symposium on Biocomputing (PSB) IBM 2019, May 2022, Apr 2025 Pacific Symposium on Biocomputing (PSB) IBM 2019, May 2022, Apr 2025 Pacific Symposium on Biocomputing (PSB) UConn Fall Frontiers in Undergraduate Research UConn Fall Frontiers in Undergraduate Research University of Connecticut Bioinformatics Seminar Mar 2018, Oct 2018 AWARDS & FELLOWSHIPS National Science Foundation (NSF) Graduate Research Fellowship National Science Foundation (NSF) Graduate Research Fellowship New England Scholar, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Science, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Science, School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, College of Liberal Arts and Science School of Engineering Academic Excellence Scholarship, University of Connecticut Dean's List, University of Connecticut Dean's List, University of Liberal Arts and Science Schoo	PRESENTATIONS	Cold Spring Harbor Laboratory Meeting on Network Biology	Mar 2021, Mar 2023, Mar 2025	
Machine Learning in Structural Biology (MLSB) Workshop at NeurIPS Research on Computational Molecular Biology (RECOMB) Research on Computational Molecular Biology (RECOMB) Apr 2019, May 2022, Apr 2025 Pacific Symposium on Biocomputing (PSB) IEEE ICCABS Workshop on Computational Advances for Next Generation Sequencing Oct 2018 UConn Fall Frontiers in Undergraduate Research University of Connecticut Bioinformatics Seminar Mar 2018, Oct 2018 AWARDS & Flatiron Postdoctoral Research Fellowship Flatiron Postdoctoral Research Fellowship First Place, MTP Intro to Deep Learning Final Project Competition New England Scholar, University of Connecticut Dean's List, College of Liberal Ans and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut National Merit Scholarship Finalist SOFTWARE D-SCRIPT S8k+ PyPI downloads ConPLex 24k+ PyPI downloads ConPLex 24k+ PyPI downloads PHILHARMONIC Sk+ PyPI downloads PHILHARMONIC Sk+ PyPI downloads WIT Undergraduate Research Opportunities Program (UROP) Advisor 2022 - 2023 HackMIT Mentor MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 - 2024 MIT Research Summer Institute (RSI) Advisor 2022 - 2023 HackMIT Mentor PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, MLSB), RECOMB, ISMB MEMBERSHIPS 8 ACTIVITIES ACTIVITIES REPS ACTIVITIES International Society for Computational Biology (ISCB) Institute of Electronics Engineers (IEEE) Association for Computational Biology (ISCB) Institute of Electronics Engineers (IEEE) Association for Computational Biology (ISCB) Institute of Electronics Engineers (IEEE) Association for Computing Machinery (ACM) Tau Beta Pi, Begineering Honor Society (TBIT) Eta Kappa Nu (IEEE-HKN)		Biophysical Society Annual Meeting (BPS)	Jan 2025	
Research on Computational Molecular Biology (RECOMB) Apr 2019, May 2022, Apr 2025 Pacific Symposium on Biocomputing (PSB) Jan 2021 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 Pattern Postdoctoral Research Fellowship 2024 - 2026 Pattern Postdoctoral Research Fellowship 2021 - 2024 First Place, MIT Intro to Deep Learning Final Project Competition 2020 New England Scholar, University of Connecticut 2017 - 2019 Dean's List, College of Liberal Arts and Sciences, School of Engineering 2015 - 2019 Academic Excellence Scholarship, University of Connecticut 2015 - 2019 Academic Excellence Scholarship, University of Connecticut 2015 - 2019 Academic Excellence Scholarship Finalist 2014 SOFTWARE D-SCRIPT https://github.com/samsledje/D-SCRIPT 58k+ PyPl downloads ConPLex https://github.com/samsledje/ConPLex 24k+ PyPl downloads PHILHARMONIC https://github.com/samsledje/ConPLex 24k+ PyPl downloads PHILHARMONIC https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 - 2024 MIT Research Summer Institute (RSI) Advisor 2022 - 2023 HackMIT Mentor 2019 - 2022 PEER REVIEW Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, BEET Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		Intelligent Systems for Molecular Biology (ISMB)	Jul 2022, Jul 2023, Jul 2024	
Pacific Symposium on Biocomputing (PSB) IDAN 2021 IEEE ICCABS Workshop on Computational Advances for Next Generation Sequencing Oct 2018 UConn Fall Frontiers in Undergraduate Research University of Connecticut Bioinformatics Seminar Mar 2018, Oct 2018 AWARDS & Flatiron Postdoctoral Research Fellowship FELLOWSHIPS Fatiron Postdoctoral Research Fellowship Pist Place, MIT Intro to Deep Learning Final Project Competition New England Scholar, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut National Merit Scholarship Finalist D-SCRIPT Stek+ PyPI downloads ConpLex https://github.com/samsledje/D-SCRIPT 58k+ PyPI downloads ConpLex https://github.com/samsledje/ConPLex 24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads VirDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor PEER REVIEW Auture, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Comp		Machine Learning in Structural Biology (MLSB) Workshop at Neurl	PS Dec 2021, Dec 2022, Dec 2023	
IEEE ICCABS Workshop on Computational Advances for Next Generation Sequencing		Research on Computational Molecular Biology (RECOMB)	Apr 2019, May 2022, Apr 2025	
UConn Fall Frontiers in Undergraduate Research University of Connecticut Bioinformatics Seminar Mar 2018, Oct 2018 AWARDS & Flatiron Postdoctoral Research Fellowship FELLOWSHIPS Rational Science Foundation (NSF) Graduate Research Fellowship National Science Foundation (NSF) Graduate Research Fellowship New England Scholar, University of Connecticut Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut National Merit Scholarship Finalist O-SCRIPT Stak+ PyPl downloads Conplex 24k+ PyPl downloads Conplex 24k+ PyPl downloads PHILHARMONIC Sk+ PyPl downloads WirDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor WIT Undergraduate Research Opportunities Program (UROP) Advisor WIT Undergraduate Research Opportunities Program (UROP) Advisor WIT Research Summer Institute (RSI) Advisor Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology, (MLSB), RECOMB, ISMB 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)		Pacific Symposium on Biocomputing (PSB)	Jan 2021	
University of Connecticut BioInformatics Seminar Mar 2018, Oct 2018		IEEE ICCABS Workshop on Computational Advances for Next Gen	eration Sequencing Oct 2018	
FELLOWSHIPS FELLOWSHIPS FIghtinon Postdoctoral Research Fellowship Storaguate Research Reliowship Storaguate Research Opportunities Program (UROP) Advisor Storaguate Research Opportunities Program (UROP) Advisor Storaguate Research Opportunities Program (UROP) Advisor Storaguate Research Summer Institute (RSI) Advisor Storaguate Research Opportunities Program (UROP) Advisor Storaguate Research Opportunities		UConn Fall Frontiers in Undergraduate Research	Oct 2018	
PELLOWSHIPS National Science Foundation (NSF) Graduate Research Fellowship 2021 - 2024		University of Connecticut Bioinformatics Seminar	Mar 2018, Oct 2018	
First Place, MT Intro to Deep Learning Final Project Competition 2020 New England Scholar, University of Connecticut 2017 – 2019 Dean's List, College of Liberal Arts and Sciences, School of Engineering 2015 – 2019 Academic Excellence Scholarship, University of Connecticut 2015 – 2019 National Merit Scholarship Finalist 2014 SOFTWARE D-SCRIPT https://github.com/samsledje/D-SCRIPT 58k+ PyPl downloads ConPLex https://github.com/samsledje/ConPLex 24k+ PyPl downloads PHILHARMONIC https://github.com/samsledje/ConPLex 24k+ PyPl downloads virDTL https://github.com/samsledje/Philharmonic 5k+ PyPl downloads virDTL https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, ISBM, RECOMB, ISMB International Society for Computational Biology (ISCB) Institute of Electronics Engineers (IEEE) Association for Computing Machinery (ACM) Tau Beta Pi, Engineering Honor Society (TBIT) Eta Kappa Nu (IEEE-HKN)	AWARDS &	Flatiron Postdoctoral Research Fellowship	2024 - 2026	
New England Scholar, University of Connecticut 2017 – 2019 Dean's List, College of Liberal Arts and Sciences, School of Engineering 2015 – 2019 Academic Excellence Scholarship, University of Connecticut 2015 – 2019 National Merit Scholarship Finalist 2014 SOFTWARE D-SCRIPT https://github.com/samsledje/D-SCRIPT 58k+ PyPI downloads ConPLex https://github.com/samsledje/ConPLex 24k+ PyPI downloads PHILHARMONIC https://github.com/samsledje/Philharmonic 5k+ PyPI downloads virDTL https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)	FELLOWSHIPS	National Science Foundation (NSF) Graduate Research Fellowship	2021 - 2024	
Dean's List, College of Liberal Arts and Sciences, School of Engineering Academic Excellence Scholarship, University of Connecticut 2015 – 2019 National Merit Scholarship Finalist 2014 SOFTWARE D-SCRIPT 58k+ PyPl downloads ConPLex 24k+ PyPl downloads PHILHARMONIC 5k+ PyPl downloads PHILHARMONIC 5k+ PyPl downloads virDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		First Place, MIT Intro to Deep Learning Final Project Competition	2020	
Academic Excellence Scholarship, University of Connecticut National Merit Scholarship Finalist 2014 SOFTWARE D-SCRIPT 58k+ PyPI downloads ConPLex 24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads virDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2012 – 2023 HackMIT Mentor PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB MEMBERSHIPS & ACTIVITIES Accidented School School (ACM) Tau Beta Pi, Engineering Honor Society (TBII) Eta Kappa Nu (IEEE-HKN)		New England Scholar, University of Connecticut	2017 – 2019	
National Merit Scholarship Finalist 2014 SOFTWARE D-SCRIPT https://github.com/samsledje/D-SCRIPT 58k+ PyPl downloads ConPLex https://github.com/samsledje/ConPLex 24k+ PyPl downloads PHILHARMONIC https://github.com/samsledje/philharmonic 5k+ PyPl downloads virDTL https://github.com/samsledje/philharmonic 5k+ PyPl downloads WIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, MLSB), RECOMB, ISMB 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)		Dean's List, College of Liberal Arts and Sciences, School of Engineer	ering 2015 – 2019	
SOFTWARE D-SCRIPT 58k+ PyPI downloads ConPLex 24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads virDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2022 – 2023 HackMIT Mentor Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		Academic Excellence Scholarship, University of Connecticut	2015 – 2019	
ConPLex 24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads VirDTL TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 1019 – 2022 HackMIT Mentor Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		National Merit Scholarship Finalist	2014	
ConPLex 24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads virDTL TreeFix-TP https://github.com/samsledje/philharmonic 5k+ PyPI downloads virDTL TreeFix-TP https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)	SOFTWARE	D-SCRIPT http	ps://github.com/samsledje/D-SCRIPT	
24k+ PyPI downloads PHILHARMONIC 5k+ PyPI downloads virDTL TreeFix-TP https://github.com/samsledje/philharmonic 5k+ PyPI downloads NIT Undergraduate Research Opportunities Program (UROP) Advisor MIT Research Summer Institute (RSI) Advisor HackMIT Mentor PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		58k+ PyPI downloads		
PHILHARMONIC 5k+ PyPI downloads virDTL TreeFix-TP https://github.com/samsledje/philharmonic 5k+ PyPI downloads virDTL TreeFix-TP https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		ConPLex	ttps://github.com/samsledje/ConPLex	
Sk+ PyPI downloads virDTL TreeFix-TP MIT Undergraduate Research Opportunities Program (UROP) Advisor MIT Undergraduate Research Opportunities Program (UROP) Advisor MIT Research Summer Institute (RSI) Advisor HackMIT Mentor PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		24k+ PyPI downloads		
Sk+ PyPI downloads virDTL TreeFix-TP https://github.com/suz11001/virDTL https://github.com/samsledje/TreeFix-TP MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		PHILHARMONIC https	nttps://github.com/samsledje/philharmonic	
MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor 2021 – 2024 MIT Research Summer Institute (RSI) Advisor 2022 – 2023 HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)			J 1	
MENTORING MIT Undergraduate Research Opportunities Program (UROP) Advisor MIT Research Summer Institute (RSI) Advisor HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		virDTL	https://github.com/suz11001/virDTL	
MIT Research Summer Institute (RSI) Advisor HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		TreeFix-TP http	os://github.com/samsledje/TreeFix-TP	
MIT Research Summer Institute (RSI) Advisor HackMIT Mentor 2019 – 2022 PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)	MENTORING	MIT Undergraduate Research Opportunities Program (UROP) Advis	or 2021 – 2024	
PEER REVIEW Nature, Nature Methods, Nature Communications, Nature Biotechnology, Current Opinions in Structural Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)				
Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology (MLSB), RECOMB, ISMB 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)		HackMIT Mentor	2019 – 2022	
& ACTIVITIES Institute of Electronics Engineers (IEEE) Association for Computing Machinery (ACM) Tau Beta Pi, Engineering Honor Society (ΤΒΠ) Eta Kappa Nu (IEEE-HKN)	PEER REVIEW	Biology, Bioinformatics, Genome Biology, Journal of Computational Biology, PLOS Computational Biology, IEEE Transactions on Artificial Intelligence, NeurIPS, Machine Learning in Structural Biology		
Association for Computing Machinery (ACM) Tau Beta Pi, Engineering Honor Society (TBII) Eta Kappa Nu (IEEE-HKN)	MEMBERSHIPS	International Society for Computational Biology (ISCB)		
Tau Beta Pi, Engineering Honor Society (ТВП) Eta Kappa Nu (IEEE-HKN)	& ACTIVITIES	Institute of Electronics Engineers (IEEE)		
Eta Kappa Nu (IEEE-HKN)		Association for Computing Machinery (ACM)		
		Tau Beta Pi, Engineering Honor Society ($TB\Pi$)		
Upsilon Pi Epsilon, Computer Science Honor Society (UPE)		Eta Kappa Nu (IEEE-HKN)		
		Upsilon Pi Epsilon, Computer Science Honor Society (UPE)		

[CV compiled on 2025-04-30]