Hi, I'm a data-driven physics researcher and software dev, an experienced teacher and admin, and an open-source contributor.

Skills programming Bash Shell, C, C#, Julia, LATEX, Mathematica, MATLAB, Python, SQL

deep learning PyTorch, Keras, Tensorflow.

applied math computational and analytic analysis of differential equations, machine learning

physics **photonics**, fluids, condensed matter, quantum computing

computational expert Linux administration, high performance computing, hardware support, git

business communications, finance, **public-speaking**, logistics, administration

misc. web development, game design, graphic design

education 202x PhD Physics Student @ University of Washington (est. 06/2022)

202x MS Applied Mathematics @ University of Washington (est. 06/2021)

2019 MS Physics @ University of Washington 2018 MS Physics @ San Francisco State University

2013 Certification in Information System Administration @ UC Berkeley Extension

2009 BS Logistical Management @ University of Rhode Island

2009 BA Psychology @ University of Rhode Island

WOrk 2018-202x Research Associate in the Kutz Dynamics Lab @ UW Dept. of Applied Mathematics

2017-202x Teaching Assistant @ UW Dept. of Physics

2015-2017 Research Assistant in Man Research Group @ SFSU Dept. of Physics & Astronomy

2014-2017 Mathematics & Physics Instructor @ Elite Educational Institute

2013-2015 Owner & Private Tutor @ Edge U Tutoring 2011-2014 SAT & ACT Instructor @ Revolution Prep

papers Sellers, S., Man, W., Sahba, S., & Florescu, M., Nature Communications (2018)

Local Self-Uniformity in Photonic Networks. doi:10.1038/ncomms14439

talks 2020 Air Force Research Lab, Dynamic Mode Decomposition for Aero-Optical Wavefront Reconstruction.

2020 Town Hall Seattle, Engage Science, Taming Lasers in the Wild Sky.

2016 ARCS NCC Symposium, Poster, Hyperuniform Disordered Photonic Structures.

2015 ARCS NCC SFSU Review, Photonic Crystals and Modern Applications.

honors 2020 AFRL Outstanding Scholar Award Recipient.

2020 Air Force Research Lab (AFRL Directed Energy) Scholar.

2019 UW Graduate Teaching Award.

2017 UW Physics Department Fellowship.

2017 SFSU Distinguished Achievement Award.

2016 ARCS Northern California Scholar.

2016 Blue Waters Petascale Institute, selected participant.

2016 SFSU College of Science & Engineering Student Project Showcase Winner, 1st place.

2015 ARCS Northern California Scholar.

2009 Magna Cum Laude, University of Rhode Island.

2005 American Invitational Mathematics Examination, contestant.

community building

Software Carpentry 2019-202x, Carpentries Instructor

Led tutorials in Linux, Python, R, and Git in live-coding workshops, bringing data tools to professional researchers.

UW Physics Slam 2019-2020, Host and organizer

Organized UW's first physics slam, bringing cutting-edge research to the public and fundraising for diversity in physics.

DRIP (Directed Reading in Physics) 2018-2019, Program organizer, Research mentor

Constructed a program to coach UW physics undergrads in research, fostering community and developing scientific literacy.

Career Development Organization for Physicists at UW 2018-2020, President, Conference organizer

Led an industry-meets-academia career conference, handling event logistics, marketing, fundraising, and programming.

Physics Graduate Student Committee 2017-2020, Event committee member

Hosted departmental socials for the UW Physics Department.

UW Physics Peer Mentor Program 2018-2019, Peer mentor

Introduced new PhD's to UW, providing guidance.

OSA, The Optical Society 2016-2017, SFSU Student Chapter President

Arranged the traveling lecturer series of talks, inviting faculty from abroad to visit SFSU.

teaching experience

Dept. Physics, University of Washington

2017-2021, Graduate Teaching Assistant

PHYS115 General Physics Mechanics

PHYS116 General Physics Electromagnetism

PHYS117 General Physics Mechanics Lab

PHYS118 General Physics Electromagnetism Lab

PHYS121 Physics w/ Calc. Mechanics Tutorial

PHYS122 Physics w/ Calc. Electromagnetism Tutorial

PHYS123 Physics w/ Calc. Waves & Optics Tutorial

PHYS121z Physics w/ Calc. Mechanics Lab

PHYS224 Thermodynamics

PHYS324 Ouantum Mechanics

PHYS325 Quantum Mechanics

PHYS423 Solid State Physics

PHYS427 Quantum Computing & Information

PHYS576 Modern Data Analysis Techniques

Dept. Physics & Astronomy, San Francisco State University

2015-2016, Graduate Teaching Assistant

PHYS360 Electricity and Magnetism

PHYS457 Principles of Electronics

Elite Educational Institute

2014-2017, Mathematics & Physics Instructor

tutoring: SAT, SAT II, Precalculus, AP Calculus, AP Physics.

courses: Geometry, Precalculus (2 sections), SAT Prep (10 sections)

Edge U Tutoring (link to archived site)

2013-2015, Owner & Private Tutor

SAT, ACT, AP Calculus, AP Physics, AP Biology

Revolution Prep

2010-2013, SAT Instructor & Private Tutor

SAT Prep (19 sections), AP Phys B Review Course, Online SAT Prep (3 sections)