Tyler Chen

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University of Washington
Lewis Hall, Box 353925
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Education

University of Washington Seattle   September 2017 - Present
Ph.D. in Applied Mathematics (in progress)
  — interests: scientific computing, computational algebra

Tufts University   August 2013 - May 2017
B.S. Summa Cum Laude in Mathematics and Physics; Minor in Studio Art

Research

University of Washington (under Anne Greenbaum)   March 2018 - Present
  — Explore the behaviour of various (parallelized) implementations of the conjugate gradient algorithm in finite precision arithmetic
  — Develop python library for reduced precision floating point arithmetic along with compatible linear algebra module (in progress)

Soft Matter Theory   April 2015 - January 2017
  — Optimize Monte Carlo simulations written in C used to explore the behavior of rigid balls constrained to the surface of ellipsoids under various conditions and constraints

Research in Industrial Projects for Students Hong Kong   May 2016 - August 2016
  — Participate in IPAM sponsored funded International Research Experience for Students (IRES) at Hong Kong University of Science and Technology
  — Design and implement a short range underwater acoustic communication protocol for the Hong Kong company ePropulsion

Teaching

  — TA, Calculus with Analytic Geometry I (UW MATH 124) . . . . Autumn 2018
  — TA, Calculus with Analytic Geometry II (UW MATH 125) . . . . Winter 2018
  — TA, Calculus with Analytic Geometry II (UW MATH 125) . . . . Autumn 2017
  — Lab TA, Electronics (Tufts PHY 41) . . . . Spring 2017
  — Lab TA, Electronics (Tufts PHY 41) . . . . Spring 2016
  — Grader, Discrete Mathematics (Tufts MATH 61) . . . . Spring 2016
  — Grader, Calculus III (Tufts MATH 42) . . . . Fall 2015
  — Grader, Differential Equations (Tufts MATH 51) . . . . Spring 2015
  — Grader, Calculus III (Tufts MATH 42) . . . . Fall 2014

Relevant Skills

Programming Languages, Packages, and Software
  — Proficient: Linux, python, scipy/numpy, Mathematica, LaTeX, TikZ/pgfplot, MATLAB, HTML/CSS/Javascript,
  — Developing: tensorflow, theano, keras, CUDA, C, C++, sympy, git, slurm, Powershell, Tasker

Other Skills
  — I can ride a bike

Awards & Honors

- Top Scholar Fellowship (UW) . . . . Fall 2017
- The Audrey Butvay Gruss Science Award (Tufts) . . . . April 2017
- Phi Beta Kappa (Tufts) . . . . April 2017
- Sigma Pi Sigma Physics Honors Society (Tufts) . . . . May 2016
- The Howard Sample Prize Scholarship in Physics (Tufts) . . . . April 2015
- Dean's List (Tufts) . . . . All Semesters

Professional

Tufts Conference and Events Services May 2014 - August 2017
Reservations Manager, Registrar, Facilitator
- Oversee all housing reservations at Tufts University during the summer conference season
- Coordinate and assist clients with logistical details relating to conferences, perform supervisory role overseeing and training new staff, schedule employee shifts (implemented a VBA/excel system to automate much of this process), prepare individualized printed materials for upcoming conferences
- Staff 24-7 welcome desk directing and assist guests as needed
- Assist with occasional academic year events

Tisch Library Digital Design Studio August 2014 - May 2017
Student Supervisor
- Provide supervision to student workers
- Staff front desk at the Digital Design Studio, assist patrons with large format printing, recording, digitization equipment, and software.