

## Tyler Chen

---

chentyl@uw.edu  
tyler@chen.pw  
http://chen.pw

University of Washington  
Lewis Hall, Box 353925  
Seattle WA, 98195

## 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 II (UW MATH 125) ..... Winter 2018
- TA, Calculus with Analytic Geometry II (UW MATH 125) ..... Fall 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.