

# Chung Yuen "Brandon" Yeung

🏠 500 College Avenue Swarthmore PA 19081 USA ☎ +1 (484) 862-6021  
✉ cyeung2@swarthmore.edu 🌐 cbyeung.github.io 📞 cbyeung 📄 cbyeung

## EDUCATION

### Swarthmore College

B.S. Engineering w/ concentration in Mechanical Engineering; Minor in Physics

Current GPA: 4.0/4.0

GRE: 163/170 Verbal, 170/170 Quantitative, 4.5/6 Writing

Swarthmore, PA, USA  
Aug 2014 – May 2018 (anticipated)

### Li Po Chun United World College of Hong Kong

IB Bilingual Diploma & UWC Diploma, Davis UWC Scholar

Score: 40/42 (41/45 w/ bonus points)

SAT: 2350/2400 (800/800 Reading, 760/800 Mathematics, 790/800 Writing)

Hong Kong  
Sep 2012 – May 2014

## EXPERIENCE

### Swarthmore Fuel Cell Vehicle

Engineering Senior Design Project

- Redesigning and rebuilding the Swarthmore prototype fuel cell vehicle
- Preparing for 2018 Shell Eco-marathon Americas

Swarthmore, PA, USA  
Sep 2017 – Present

### Swarthmore Nonlinear Dynamics Lab

Research Assistant

- Contributed to improving mechanistic studies of ultrasound-assisted, microbubble-mediated thrombolysis
- Trained to operate a confocal fluorescence microscope
- Fabricated synthetic thrombi from 0.1 – 1.0 unit/mL thrombin
- 3D printed scaled models of thrombi
- Analysed confocal micrographs and 3D prints for porosity variation
- Developed technique for performing finite element analysis on 3D thrombus model in ANSYS
- Estimated effective stiffness of thrombus in x, y, z directions in simulation
- Investigated variations in experimental procedure to isolate causes of unexpected anisotropy
- Implemented Rayleigh-Plesset Equation (single bubble oscillation due to sound field) in Mathematica

Swarthmore, PA, USA  
Jun 2016 – Jul 2017

### Tencent (Internet Company)

Data Centre Intern

- Monitored and adjusted air conditioning systems of data centre modules based on load
- Installed baffles on module housings to reduce cool air leakage
- Assisted with inspections of servers and air conditioning systems during routine power cut drill

Shenzhen, China  
Jun – Jul 2015

## PUBLICATIONS

### Conference Presentation

- Yeung BCY, Everbach EC, 2017, "Simulating Fibrin Clot Mechanics Using Finite Element Methods," 173rd Meeting of Acoustical Society of America and 8th Forum Acusticum, Boston, MA

### Posters

- Yeung BCY, Everbach EC, 2017, "Simulating Fibrin Clot Mechanics Using Finite Element Methods," Biomedical Acoustics Best Student Paper Competition, 173rd Meeting of Acoustical Society of America and 8th Forum Acusticum, Boston, MA
- Yeung BCY, Everbach EC, 2016, "Fabricating and 3D Printing Fibrin Clots to Gain Insight Into Sonothrombolysis," Sigma Xi Student Research Poster Session, Swarthmore College, Swarthmore, PA

## HONOURS

- Tau Beta Pi Scholarship, Tau Beta Pi
- Member Acoustical Society of America
- President Tau Beta Pi Swarthmore College Chapter
- Member Sigma Xi Swarthmore College Chapter
- Member Royal Aeronautical Society
- John W Perdue Memorial Prize Rising Junior w/ Highest GPA in Engineering Department

Jun 2017  
Jun 2017 – Present  
May 2017 – Present  
Nov 2016 – Present  
Sep 2016 – Present  
Jun 2016

## COMMUNITY SERVICE

- Co-leader Mandarin Tutorial Team Li Po Chun UWC of Hong Kong
- Created vector illustrations for Wikipedia articles
- Volunteered at Mai Po Nature Reserve Hong Kong to maintain and improve wetland conditions

Sep 2013 – Apr 2014  
Sep 2013 – Apr 2014  
Sep 2012 – Apr 2014

## SKILLS & INTERESTS

- **Software:** Microsoft Office, Apple iWork, LaTeX, Adobe Illustrator, KaleidaGraph, MATLAB, Mathematica, ANSYS, ImageJ
- **Hardware:** Basic Electronics Lab, Basic Wet Lab, Basic Mechanics Lab, 3D printing
- **Languages:** Mandarin, Cantonese, Python, Basic HTML&CSS, Basic Verilog
- **Career Interests:** Aeronautics & Astronautics, Ultrasound Imaging
- **Extracurricular Interests:** Swarthmore College Golf Team 2014, Li Po Chun Badminton Team 2013, Sketching, Photography