

# KENNY CHANG

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## EDUCATION

*B.S. Mathematics + M.S. Electrical Engineering*, Stanford University (Spr 2018)  
*General Visiting Student in Electronic Engineering*, Tsinghua University Fall 2016  
*High School Diploma*, Fairmont Preparatory Academy Spr 2014

## AWARDS

*Honor Roll*, William Lowell Putnam Mathematical Competition Fall 2015  
Ranked in the top 500 in nationwide intercollegiate math competition

## EXPERIENCE

*Engineering Policy Internship*, Federal Communications Commission Media Bureau Sum 2017  
Final presentation to the Engineering Division concerning the effects of COFDM modulation on implementing the next-generation broadcast TV standard (ATSC 3.0)  
*Research Internship*, Stanford Department of Electrical Engineering (PI: Ayfer Özgür) Sum 2016  
Theoretical project examining the information theoretic constraints on wireless signaling under a stochastic or unreliable power source, as in an energy harvesting device  
*ML/Signal Processing Intern*, SETI Institute Spr 2016  
Used sophisticated machine learning to develop data mining algorithms for analyzing massive noisy and unstructured extraterrestrial signal data in a distributed setting  
*Research Internship*, Stanford Department of Statistics (PI: Susan Holmes) Sum 2015  
Developed a dynamic latent trait model to help explain patterns in microbiome data

## STANDARDIZED TESTS

*SAT*, Critical Reading: 800, Mathematics: 770, Writing: 760 Nov 2013  
*GRE*, Quantitative: 168, Verbal: 166, Writing: 5.0 Jun 2016

## WRITING SAMPLES

*Energy-Harvesting Wireless Transmission over a Fast-Fading Channel* [\[link\]](#)  
Original research related to limitations on wireless transmission for energy-harvesting systems  
*Semidirect Products* [\[link\]](#)  
Writing in the Major (WiM) project modeling a chapter in an imaginary abstract algebra textbook

## TECHNICAL SKILLS

*Computer Languages*: MATLAB ●●●, Python ●●●, R ●●●, C/C++ ●●○, Verilog ●○○, Java ●○○  
*Foreign Languages*: Spanish ●●●●, Mandarin ●●●○, Cantonese ●●○○, Quechua ●○○○  
*Other*: Unix shell, L<sup>A</sup>T<sub>E</sub>X, circuit and logic design, convex and linear optimization, Microsoft suite

## KEY COURSEWORK

- Computer Networking
- Wireless Information Theory
- Digital Signal Processing
- Circuit Design and Analysis
- Convex Optimization
- Functional Analysis
- Stochastic Processes
- Statistical Inference
- Machine Learning

## STUDENT LEADERSHIP

- Co-President*, Hong Kong Student Association (HKSA) 2017 – 2018  
Co-led cultural organization of over 400 members; helped organize small- and large-scale social, cultural, and political events relating to Hong Kong and the Cantonese diaspora
- Student Staff*, Institute for Diversity in the Arts (IDA) 2017 – 2018  
Helped inaugurate IDA's Arts Practice Cohort, a group of artists dedicated to promoting traditionally-underrepresented art forms on campus and in the wider community
- Financial Officer*, Society of Latino Engineers (SOLE) 2016 – 2017  
Managed over \$20,000 in organization funds; helped solicit over \$8,000 in funding from corporate sponsors; helped reorganize corporate sponsorship and contact structure
- Technical Liaison*, Opportunity Job Fair (SOLE) 2016  
Led electronic student registration for Stanford Engineering's largest job fair for underrepresented groups in STEM