Chia-Hao Chang

chchangkh@utexas.edu 3541 N. Hills Dr. #A, Austin TX 78731 737-224-0338

OBJECTIVE Pursue a Ph.D degree in the DICE.

AREA OF Network Analysis, Applied Mathematics.

INTEREST Including: Network analysis, Decision making, Game theory, Applied probability,

Optimization, Resource allocation.

EDUCATION Bachelor of Science (B.S.), National Taiwan University (NTU), Taipei, Taiwan.

Major: Electrical Engineering (EE), Sept. 2013- Jan. 2018.

Minor: Physics (Phys), Sept. 2014- Jan. 2018.

GPA Major (EE): 4.17/4.30

Minor (Phys): 4.27/4.30 Overall: 4.16/4.30

RESEARCH EXPERIENCE Applied Electromagnetic Laboratory (with Prof. Jean-Fu Kiang): Sept. 2015- Jan. 2018

- Topic: Wireless Communication: Cognitive Radio, Spectrum Access, Power Allocation, Game Theory, Markov Decision Process, MIMO.

- Developed a novel transmission scheme of a cognitive wireless-powered communication network.
- Proposed a subproblem that efficiently solved the originally non-convex optimization problem and proved the relation between two problems.
- Gave rigorous proofs to the lemmas and theorems proposed in the paper.

COURSE Quantum Physics Project:

PROJECT Quantum Information Theory and its Applications Feb. 2016- June. 2016.

Quantum Physics Project:

Hydrodynamics Interpretation of Quantum Mechanics Oct. 2015- Jan. 2016.

HONOR Presidential Award: 3 times 2013, 2014, 2017.

 \bullet Awarded to students ranked within the top 5 % in each semester

High School Physics Contest Winner in Kaohsiung, Taiwan: Oct., 2012

• First prize and representative of Kaohsiung city.

Selection Test for International Physics Olympiad: Second Round. Nov., 2012

WORKING Teaching Assistant at NTU: Volunteered-Service Learning Class, Sept. 2016- Jan. EXPERIENCE 2017.

Private Tutoring: High School Mathematics and Physics, Sept. 2014- Jan. 2018.

${\bf STANDARDIZED} \ GRE \ General \ Test:$

TEST SCORES Verbal: 150/170, Quantitative: 170/170, Analytical Writing: 3.0/6.0 May, 2017

TOEFL iBT:

Total: 102/120, Reading: 28, Listening: 29, Speaking: 20, Writing: 25 Sept., 2017

ACTIVITIES Club Leader: NTU Kind-Kids Club Feb. 2016- June 2016.

• Leader of a seventy-four person voluntary club.

Club Member: NTU Kind-Kids Club Sept. 2013- June. 2017.

• Weekly volunteered curricular service at Bethany Orphanage, Taipei, Taiwan.

Camp Activity Organizer: NTUEE Summer Camp Organizer July. 2014.

• Holded a summer camp dedicated for high school students to get to know electrical engineering.