CHIA-HAO CHANG

https://chia-hao-chang.github.io/

EDUCATION Columbia University	New York City, NY	Sep 2020-present		
 Ph.D. in Operations Research Advisor: Vineet Goyal 		GPA: 4.06/4.00		
 Graduate Coursework: Optimization (I) and Optimization, Matching Markets and Algori Tang's family fellowship. 	(II), Stochastic Modeling (I) and (II), Analysis and Pro thms, Theoretical Statistics (I), Analysis of Algorithm	bability [♠] , Probability (II) [♠] , Convex s (I), Game Theory		
The University of Texas at Austin (UT Austin)	Austin, TX	Aug 2018 – May 2020		
 M.S. in Decision, Info. and Commun. Engr. (DICE), Electrical and Computer Engineering (ECE) Advisor: Prof. John Hasenbein and Prof. Thomas Wiseman Thesis: Effects of Patient Heterogeneity in a First-Come-First-Serve Kidney Transplant Model 				
 National Taiwan University (NTU) B.S. in Electrical Engineering (EE) with minute NTU Presidential Award for 3 semesters: A 	Taipei, Taiwan or in Physics (Phys) warded to students ranked within the ton 5% in eac	Sept 2013 – Jan 2018 GPA:4.15/4.30		
RESEADCH INTEDEST		in semester.		
My research interest lies in the intersection of o	ntimization dynamic decision making and game the	PORV		
Dvnamic Decision Making				
 Stochastic Optimal Control and Stochastic Dynamic Programming 				
Approximation of large scale Markov decision	on processes			
Game Theory				
 Learning in Games 				
Inference in strategic settings				
RESEARCH EXPERIENCE				
Large Scale MDP	with Prof. Vineet Goyal	June 2021-present		
 Large Scale MDP model for proactive service Design an algorithm which coordinates the 	in hospital. Characterize the structural properties in to current resource and future demand.	the associated fluid approximation.		
Large Scale Game SolvingInvestigating the possibility of mirror descent	with Prof. Christian Kroer nt to solve large Scale games, with variance reductio	Sep 2020 – Apri 2021 n.		
Game Theory Dynamic game model for staged financing; 	with Prof. Thomas Wiseman investigate the effects of signal structure on the asso	June 2019 – Dec 2019 ociated perfect Bayesian equilibria.		
 Strategic Queues Game-theoretic queueing models for kiden Presented at INFORMS Annual Conference 2 	with Prof. John Hasenbein y transplantation; analyzed the parameter sensitivity 2019.	Jan 2019 – Dec 2019 / in the MDP.		

TALKS

INFORMS Annual Conference 2019

Seattle, WA

Oct 2019

• Session: WB11 - Queueing Approximations and Strategic Queues.

High School Physics Contest	Kaohsiung, Taiwan	Oct 2012
Winner		
First prize and representative of Kaohsiung Cit	ty.	
Selection Test for International Physics Olympiad	Taiwan	Nov 2012
Second round		
TEACHING EXPERIENCE		
Teaching Assistant	Columbia University	
 IEOR 4102: Stochastic Modeling for MSE 		Spring 2021
 IEOR 4106: Stochastic Models 		Spring 2021
IEOR 4106: Stochastic Models		Fall 2021
IEOR 3609: Advanced Optimization		Spring 2022
 IEOR 6711: Stochastic Modeling (I) (Ph.D. core 	2)	Fall 2022
Teaching Assistant	NTU	Sept 2016 – Jan 2017
Volunteered-Service Learning Class		
Employment		
Mandatory Military Service	Tainan, Taiwan	Feb 2018 – June 2018
Private, Taiwan Army.		
LEADERSHIP AND EXTRACURRICULA	R ACTIVITIES	
Club Leader	NTU Kind-kids Club	Feb 2016 – June 2016
Leader of a seventy-four person voluntary clu	b which I participated from freshman to senior.	
TECHNICAL SKILLS		

Programming Languages
 MATLAB, Python, ETEX

Spoken LanguagesChinese(native), Taiwanese(native), English(fluent)