

Kai Ye

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EDUCATION	Ph.D. Candidate in Electrical Engineering, Advisor: Prof. Ning Lu	Starting Fall 2021
	North Carolina State University, College of Engineering, Raleigh, NC	
	Master of Science in Electrical Engineering and Computer Engineering	Dec. 2020
	University of Minnesota-Twin Cities, College of Science and Engineering, Minneapolis, MN GPA 3.923/4.0	
	Bachelor of Science in New Energy Science and Engineering	May 2019
	The Chinese University of Hong Kong-Shenzhen, School of Science and Engineering, Shenzhen, China Participated in the integrated BS-MS program with University of Minnesota-Twin Cities GPA 3.30/4.0	
	Summer Exchange in Electrical Engineering	June 2017 - August 2017
	Technische Universität Dortmund, Dortmund, Germany	
Related Experience & Projects	Machine Learning on Yelp photo classification	Spring 2020
	Artificial Intelligence (CSCI5511), University of Minnesota-Twin Cities	
	<ul style="list-style-type: none">Developed and optimized multiple-instance multiple-label learning strategy on an image database with 500k photos from Yelp Inc., labelling 10k restaurants using 9 attributes with 82% accuracyAnalyzed and compared shallow feature descriptors and deep neural networks in image classification	
	Duplicate Classification on Quora Question Pairs	Fall 2019
	Introduction to Nonlinear Optimization (EE5239), University of Minnesota-Twin Cities	
	<ul style="list-style-type: none">Adopted NLP techniques with SVM to classify duplicate question pairs on Quora.Processed four types of extracted features by different data analysis techniquesIndicated a convincing scheme to solve near-duplicate detection problems on other online forums.	
	Comprehensive design of a residential PV system	Spring 2019
	Modeling, Analysis, and Control of Renewable Energy Engineering (EE8744), University of Minnesota-Twin Cities	
	<ul style="list-style-type: none">Revised a grid-connected roof mounted PV system of 30 kWOptimized the orientation, tilt angle, connection, and MPPT control of PV panelsAnalyzed the reliability of the system with efficiency and economic benefits	
	Undergraduate Research Assistant, Advisor: Xi Zhu	September 2017 – August 2018
	Institute of robotic and intelligent manufacturing, Shenzhen, China	
	<ul style="list-style-type: none">Investigated in developing and improving multi-exciton organic PV cells with singlet fissionAnalyzed the intrinsic properties of different crystal forms with Machine Learning	
Awards	Graduate Teaching Assistantship, Advisor: Philip Cohen	Spring 2020
	University of Minnesota-Twin Cities, Department of Electrical Engineering and Computer Engineering	
	Dean's list award	2017-2018
	The Chinese University of Hong Kong-Shenzhen, School of Science and Engineering	
Interests	Amateur Designer and Photographer	
	<ul style="list-style-type: none">Worked as student assistant in the Communication and Public Relations Office at CUHK(SZ), authorized for photography and post-processing for over 100 school activities and forumsCo-organized the 6th Shenzhen International Industrial Design Fair in 2018, attracted nearly 100k viewers	
	Journalist Intern	May 2018 - July 2018
	Shenzhen Media Group, Shenzhen, China	
	<ul style="list-style-type: none">Reported more than 30 daily news on regional stationConducted field research in entrepreneurs and migrant workers	