



List of Potential Hosting Institutions for Professor Charles K. Kao Research Exchange Scholarship 2022

Code No.	Institution	Department/Professor Nominated	Topics/Areas of the Research Project	Student Place(s) Available
1	New Jersey Institute of Technology, USA	Professor Mengqiang (Mark) Zhao Otto H. York Department of Chemical and Materials Engineering Website: https://cme.njit.edu/	Low-Dimensional Materials for Electronics and Biosensors	1-2
2	National Taiwan University, Taiwan	Professor An-Chi Wei Department of Electrical Engineering Graduate Institute of Biomedical Electronics and Bioinformatics Website: https://ntubmse.com/	Systems biology, modeling and simulation of biological systems, bioenergetics and metabolism, mitochondria	1-2
3	Technika University of Gdańsk, Poland	Professor Małgorzata Szczerska Associate Professor Department of Metrology and Optoelectronics Website: https://pg.edu.pl/30c9e61e56_malgorzata.jedrzejewska-szczerska	Fiber optic sensors	1-2
4	Chang Gung University, Taiwan	Professor Thomas Kin Fong Lei Professor, Graduate Institute of Biomedical Engineering Research Fellow, Department of Radiation Oncology Website: https://sites.google.com/site/cgubiomems/	Cell culture in microfluidic device	2



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5	Northwestern University, USA	Professor Ping Guo Assistant Professor Department of Mechanical Engineering Website: https://pingguo.mech.northwestern.edu/	Near field holographic acoustic manipulation; ultra-precision diamond turning of optical optics; computer vision based precision metrology	1
6	University of California, Davis, USA	Professor Shiqian Ma Associate Professor Department of Mathematics Website: https://www.math.ucdavis.edu/~sqma/	Optimization; Operations Research; Data Science; Machine Learning; Signal Processing; Image Processing	1-2
7	University of Southern California, USA	Professor Xiang Ren Assistant Professor Department of Computer Science Website: https://shanzhenren.github.io/	Natural language processing; Machine learning	1-2 (prefer remote supervision given current COVID-19 situation)
8	Georgia Institute of Technology, USA	Professor Chao Zhang Assistant Professor School of Computational Science and Engineering Website: http://chaozhang.org/	Data mining; Machine learning; Natural language processing	1-2



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9	King Abdullah University of Science and Technology (KAUST), Kingdom of Saudi Arabia	Professor Xin Gao Professor, Computer Science; Acting Associate Director, Computational Bioscience Research Center; Deputy Director, Smart Health Initiative; Lead, Structural and Functional Bioinformatics (SFB) Group; Computer, Electrical and Mathematical Sciences and Engineering Division, Website: https://www.kaust.edu.sa/en/study/faculty/xin-gao	Bioinformatics, computational biology, machine learning, and big data	1-2
10	University of Notre Dame, USA	Professor Xiangliang Zhang Associate Professor Computer Science and Engineering Website: https://engineering.nd.edu/faculty/xiangliang-zhang/	Machine learning and data mining with an emphasis on recommender systems, network science, and mitigation of attacks on recommender systems.	1-2
11	Georgia Institute of Technology, USA	Professor Xiuwei ZHANG Assistant Professor School of Computational Science and Engineering Website: https://cc.gatech.edu/~xzhang954	Computational and machine learning method development for single cell genomics data.	1-2



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12	University of Washington, Seattle, USA	Professor Sheng Wang Assistant Professor Paul G. Allen School of Computer Science & Engineering Website: https://homes.cs.washington.edu/~swang/	NLP applications (e.g., word sequence -> protein sequence, text generation) and ML applications (e.g., graph representation learning, zero-shot learning) in biomedicine	1-2
13	Yale University, USA	Professor Hong X. Tang Department of Electrical Engineering Website: https://www.eng.yale.edu/tanglab/	Photonics	1-2
14	University of Warwick, UK	Dr. Emma MacPherson Department of Physics Website: https://warwick.ac.uk/fac/sci/physics/staff/academic/emaperson/	1. Data classification of TeraHertz imaging data; or 2. Robot-assisted positioning of TeraHertz probes for patient imaging.	1
15	National Chiao Tung University, Taiwan	Professor Chow Chi Wai Full Professor Department of Photonics Website: http://cpanel-199-19.nctu.edu.tw/~cwchow/members.html	Optical Wireless Communication (OWC)	1



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16	University of Georgia, USA	Professor Mable Fok Associate Professor School of Electrical and Computer Engineering Website: https://engineering.uga.edu/people/profile/mable-fok-ph.d	1. Bio-inspired microwave photonic system 2. Fiber optic sensors for soft robotics	1-2
17	Purdue University, USA	Professor Ninghui Li (ninghui@purdue.edu) Professor Department of Computer Science Website: https://www.cs.purdue.edu/homes/ninghui/	Differential Privacy	1-2
18	Purdue University, USA	Professor Aniket Kate (aniket@purdue.edu) Associate Professor Department of Computer Science Website: https://www.cs.purdue.edu/homes/akate/index.html	Secure Multi-party Computation	1-2
19	Pennsylvania State University, USA	Professor Syed Rafiul Hussain (hussain1@psu.edu) Assistant Professor Department of Computer Science and Engineering, Website: https://syed-rafiul-hussain.github.io/	Security and privacy issues in telecommunication technologies	1-2



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20	Carnegie Mellon University, Pittsburgh, USA	Professor Pulkrit Grover Associate Professor Electrical and Computer Engineering Website: https://www.ece.cmu.edu/directory/department/faculty/G/Pulkrit_Grover_7070.html	<ol style="list-style-type: none"> 1. Novel ML techniques for inverting non-invertible functions, with applications to neurostimulation. 2. Information flow in the brain: estimation using artificial neural networks. 	2
21	University of California, San Diego, USA	Professor Arya Mazumdar Associate Professor The Halicioğlu Data Science Institute (HDSI) Website: http://mazumdar.ucsd.edu/index.html	<ol style="list-style-type: none"> 1. Covid Testing Strategy in Dynamic Network 2. Reinforcement Learning to Decode Error-Correcting Codes 	1-2
22	University of Bristol, UK	Professor Sidharth (Sid) Jaggi Associate Professor School of Mathematics Website: https://research-information.bris.ac.uk/en/persons/sidharth-sid-jaggi	Group-testing for COVID https://arxiv.org/abs/2102.10256	1-2