CHI-JEN (ROGER) LO

No.1, Sec.4, Roosevelt Rd., Taipei 10617, Taiwan
+886 988-275-180 ⋄ intelisef47@gmail.com

EDUCATION

National Taiwan University, Taipei, Taiwan *September 2019 - Present*
Master of Science in Graduate Institute of Communication Engineering (4.1/4.3)
President of Students Association, Valedictorian (expected)

National Taiwan University, Taipei, Taiwan *September 2013 - June 2018*
Bachelor of Science in Electrical Engineering
Representative of EECS College in the Students Association

Massachusetts Institute of Technology, Cambridge, MA *April 2019 - February 2020*
MicroMasters Online Credential Program in Supply Chain Management

RESEARCH INTERESTS

Algorithm Design, Network Optimization, Wireless M2M Network, Cyber-Physical System

RESEARCH EXPERIENCE

Mobile Networks and Wireless Communications Lab, NTU, Prof. Hung-Yun Hsieh
A first author paper was submitted to IEEE ISIT 2021 (now under review), where we focus on stochastic network scheduling problems applied to wireless M2M networks and IWSNs in a data-centric regime.

Artificial Intelligence and Multimedia Lab, NTU, Prof. Tsung-Nan Lin
Designed and implemented a software-defined network (SDN) routing policy with meter-based method for enhancing the QoS of video streaming services. Built an intelligent dialogue agent for the front desks.

Data Management and Information Discovery Lab, Academia Sinica, Dr. De-Nian Yang
Conducting research about social IoTs for the surveillance of COVID-19 pandemic, in which we use spatio-temporal Hawkes process for modelling infectious events.

Video and Image Processing Lab, NTU, Prof. Wen-Ming Yan
Presented a paper about determinant, hoping to smooth out its awkward appearance in modern linear algebra. Several new definitions of determinants are also discussed.

Intelligent Vehicle and Mechatronics Lab, NTU, Prof. Kang Li
Applied SLAM (simultaneous localization and mapping) and YOLOv3 (computer vision toolkit) on a automated guided vehicle (AGV). Imported a self-driving bus into NTU.

PUBLICATIONS

Chi-Jen Lo, Hung-Yun Hsieh. **Information-Centric Scheduling for Wireless Sensor Networks by Adaptive-Rate Compression** (Submitted to IEEE ISIT 2021, and is now under peer review process. Transactions version under work: https://tonic.ee.ntu.edu.tw/depot/rogerlo47/Data_Centric_Paper_25.pdf)

RELEVANT COURSEWORK

Advanced: Queueing Theory, Game Theory, Matrix Computations, Numerical Linear Algebra, Convex Optimization, Quantum Algorithms, Stochastic Calculus*, Selected Topics in Engineering Mathematics, Overcoming Uphill Challenges for the New Generation Entrepreneurs, Applications of Quantum Computation (* for audit)

Undergraduate: Algorithms, Data Structures, Graph Theory, Matrix Theory, Computer Networking, Probability and Statistics, Principle of Communications, Discrete Mathematics, Complex Variables, Signals and Systems, Computer Programming, Linear Algebra, Calculus (I)(II)

SKILLS

Languages	English, Mandarin, Taiwanese
Programming Languages	Python, Matlab, C++, SQL
Softwares	Excel, LaTeX, AMPL, SAS

WORK EXPERIENCE

IEEE Global Communications Conference 2020 *December 2020*
Deliberative Group

· Engaging in some transactional works for ensuring the smoothness of on-site and online sessions.

Graduate Institute of Communication Engineering, NTU *September 2019 - Present*
Research / Teaching Assistant

· Research on cyber-physical systems and the algorithms design of wireless M2M networks.
· Teaching assistant of Convex Optimization (graduate), Probability and Statistics (compulsory).

Institute of Information Science, Academia Sinica *May 2019 - Present*
Research Assistant

· Design proper approximation algorithms for NP-hard problems.
· Join advanced algorithms study group and graph neural network study group.

ACADEMIC ACHIEVEMENTS

Valedictorian, Graduate Institute of Communication Engineering, NTU
Third Award in Mathematics, Taiwan International Science Fair (TISF)
Honorable Mention, Mobile Heroes, Ministry of Economic Affairs, Taiwan

EXTRA-CIRRUCULAR

President of Students Association, Graduate Institute of Communication Engineering, NTU
Representative of EECS College in the Students Association, NTU
I've also held several affairs that there's about a hundred of people under my organization, which helped improving my leadership and social abilities a lot, also made some good friends.

PERSONAL TRAITS

Highly motivated and eager to learn new things.
Strong motivational and leadership skills.
Ability to work as an individual as well as in group.
I study EECS, and I'm also interested in finance, supply chain, and any other fields related to business.