Weijun Yuan

+852 9764 0296 · wyuanac@connect.ust.hk

EDUCATION

Bachelor of Science in Physics (International Research Enrichment Track) 2016 to 2020

The Hong University of Science and Technology (HKUST)
Cumulative Grade Average (CGA): 3.984/4.3

Exchange Student 2019

Columbia University in the City of New York

RESEARCH EXPERIENCE

Research Assistant 2018 to present

Department of Physics, HKUST

- Assistant to Professor Gyu-Boong Jo, building apparatus for cooling Erbium atoms
- Built the ECDL and calculated the optical dipole trap (ODT) parameters
- Helped Ph.D. seniors with coils of magneto-optical trap (MOT) and designing quasi-2D optical dipole trap for Erbium BEC

Research Internship 2019

Department of Physics, Columbia University in the City of New York

- Assistant to Professor Sebastian Will, working on achieving ultracold NaCs molecules
- Worked with Ph.D. seniors on 2D Cesium MOT, building the optics and electronics

Undergraduate Research Opportunities Program 2017-2018

Department of Physics, HKUST

- Assistant to Professor Kwok Yee Michael Wong, working on neural dynamics.
- Used deep neural network to study the information processing in the brain

Preprint

Seo, B., Chen, P., Chen, Z., **Yuan, W.,** Huang, M., Du, S. and Jo, G. *Efficient production of a narrow-line erbium MOT with two-stage slowing*. Phy. Rev. A 102 013319 (2020). arXiv:1912.12649

PRESENTATION

Seo, B., **Yuan, W**., and Jo, G., “A versatile apparatus for quantum simulation with ultracold dipolar Erbium atoms”, The 26th International Conference on Atomic Physics (ICAP 2018), Barcelona, Spain, 22-27 July 2018

HONORS AND AWARDS

Croucher Scholarships for Doctoral Study, *Croucher Foundation* 2020

Dean’s fellowship, *Graduate School of Arts and Sciences, Columbia University.* 2020

Charles H. Townes Fellowship, *Department of Physics, Columbia Universit.*	2020
Renewable Admission Scholarship (four-year full tuition fee and living allowance), *HKUST*	2016-2020
Dean's List, *School of Science*, *HKUST*	2017-2019
Innovation and Technology Scholarship, *Innovation and Technology Commission of the HKSAR Government, HSBC and The Hong Kong Federation of Youth Groups*	2018-2019
School of Science Exchange Scholarship, *School of Science, HKUST*	2019
Lee Hysan Overseas Scholarship, *Lee Hysan Foundation*	2019

TECHNICAL COMPETENCY

Python

- Used Keras and TensorFlow to build deep neural network

SolidWorks

- Designed the coils holders, mirror mounts for specific experiments

CircuitMaker

- Designed PCBs for some basic circuits.

UNIVERSITY AND COMMUNITY SERVICE

Organizer and host of STEM education workshop 2018
The Hong Kong Federation of Youth Groups
- Held three workshops on air cannon to teach primary students about air pressure

Peer Mentoring Program 2017-2018
School of Science, the Hong Kong University of Science and Technology
- Mentored freshmen to help them to adapt to university life

Volunteer 2017
The Salvation Army
- Visited the elderly in a nursing home and taught them Chinese calligraphy

Languages

Chinese (Native)

English (fluent)