

HAIXUAN CHENG

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EDUCATION

The Chinese University of Hong Kong (CUHK), Hong Kong S.A.R. *2020 to 2022*
M.Phil in Quantum Sensing in Physics

Beijing Normal University (BNU), Beijing *2016 to 2020*
B.S. in Physics
Member of Student Union of BNU
Overall GPA 3.8/4.0; Core GPA 3.9/4.0

EXPERIENCE

CUHK, Department of Physics August 2020 - Present
PhD Student *Sha Tin, Hong Kong*

- Quantum sensing technology based on nano-diamond, application on ultra-thin polymer film
- PhD project, the paper is currently under writing
- Data processing and modelling completed by self-written Python project

BNU, Department of Physics December 2017 - February 2019
Participant *Beijing*

- Systematic research on graphene quantum dots defined by round graphene p-p junction
- Figures on the paper were generated by MATLAB by me
- Submitted paper to *Phys.Rev B* (arXiv: 1908.06582)

BNU, Department of Physics January - April 2017
Independent Researcher *Rizhao, Shandong Province*

- The influence of various components in polluted seawater on sound velocity in water was studied
- COMSOL multi-fields simulation was involved
- Published paper *Study on sound velocity in complex polluted seawater* to *Journal of College Physics*

BNU, Department of Physics March 2017 - February 2018
Main Participant *Beijing*

- Study on the growth of Graphene-hexagonal Boron Nitride composite structure by Chemical Vapor Deposition
- Undergraduate scientific research project, Beijing municipal key innovation projects

MORE ABOUT ME

Basic Modern Physics	Advanced Quantum Mechanics, Quantum Optics, etc
Basic Math	Graph Theory (<i>learning</i>), Group theory, Topology, Lie algebra, etc
Computer Skills	Python, Linux, PyTorch and GNN (<i>learning</i>), etc
English	TOEFL(MBS) 101, CET-6 580, Communicate with foreigners fluently
Habits	Travel, Raspberry Pi, Running, Film Photography, Digital equipments
Dream	To build a super cyborg like Alita (animation and movie character), so I am very keen on AI, neural and brain, robots, sensors and chips.