# Lu Niu

PhD Candidate in Physics

Department of Physics Email: LukeNiu@outlook.com

The University of Sydney

Web: https://github.com/ConAntares

NW, Australia

GitHub: https://github.com/ConAntares

#### **RESEARCH INTEREST**

#### **Quantum Computation:**

Quantum circuit.

#### **Ab Initio:**

The surface effect of metal nano-particles.

#### **EDUCATION**

### The University of Sydney

Jul. 2019 - Present

PhD of Science in Physics

**Subject:** Plasmonics

Thesis: Quantum Computation Logic Circuits Realization Based on Plas-

mon Effects.

**GPA:** Excepted

## University of Science and Technology Beijing

Sep. 2015 - Jun. 2017

MPhil of Science in Physics

**Subject:** Atom and Molecular Physics

**Thesis:** Effect of External Field on the IV Characteristics through the Molec-

ular Nano-junction.

**GPA:** 3.6

#### **EXPERTISE AND TECHNICAL STRENGTHS**

**Programming:** C/C++, Fortran, Python, Julia, LTEX **Software:** Linux, Git, TensorFlow, VASP, Octopus

**Expertise:** Mathematical Analysis, Topology, Algorithms, Machine Learning,

Density Functional Theory, Plasmonics, Molecular Physics

Quantum Optics, Quantum Computation

**Language:** Mandarin Chinese (Native), English