Jiayu Yang

Undergraduate

No.5 Yiheyuan Road Haidian District, Beijing, P.R.China 100871

(+86) 18092689592 | yangjiayu2015@hotmail.com | jackiey2018.github.io | JackieY2018

Education

School of Physics, Peking University *Beijing, China*

Undergraduate in Physics *Sept. 2018 - Now*

- Overall GPA: **3.925/4.0** — *TOP 5 in the Grade*
- Selected Scholarships and Awards
  — China National Scholarship(2020)
  — China National Scholarship(2019)
  — Mingde Scholarship(2018)
- Selected Courses
  — Group Theory(Graduate Course) **99**
  — Advanced Quantum Mechanics(Graduate Course) **97**
  — Quantum Statistical Physics(Graduate Course) **95**
  — Electrodynamics **99**
  — Methods of Mathematical Physics (2) **98**
  — Seminar for Quantum Mechanics **95**
  — Modern Physics Laboratory I **93**

Skills

Languages Chinese, English
Coding Python, C, Matlab, LaTex
Software COMSOL, Lumerical FDTD Solutions

Research Experience

Group of nanophotonics, Institute of modern opticals, School of Physics *Peking University*

Directed by Prof. Xiaoyong Hu *July 2019 - PRESENT*

- Working on the research of higher order EPs in the system consisting of two coupled waveguides propagating circularly polarized light.
- Participated in writing a literature review on all-optical switching. Finished the part of PT symmetry and exceptional points along.
- Worked on the design of photonic crystal to create an exceptional point in the structure.
- Worked on the inverse design of grating couplers with wide band.
- Took part in the discuss of an EP-encircling project in system of three waveguides and inverse design project of all-optical device.

Projects

Prediction Model on page view based on history view data.

May 5th-7th, 2020

- The task in Contemporary Undergraduate Mathematical Contest in Modeling in Peking University, also called Cup of Jiang Zehan.
- Use python to sort the history view data and use Matlab to train the BP neural network model.

AI for 2048 the battle mode.

May – June, 2020

- Use python in the whole process.
- Use minmax algorithmic and Alpha-Beta pruning primarily.