

Yong Kwon

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Undergraduate student

PKNU, Busan, Republic of Korea

Research interests

Quantum information, quantum computing, quantum computers, open quantum system

Education

2016 – Present **Pukyong National University** – Busan
B.S. in physics
Mentors: Prof. Seung Ki Baek

Publications

2021 *TBA*

Research experience

2021 – Present **Entanglement vs mutual information on two qubit system**
Mentors: Prof. Jaegon Um (POSTECH), Prof. Seung Ki Baek (PKNU)

- Investigate on two spin-1/2 particles
- Find correlated information entropy on classical definition and quantum definition
- Compare two entropy values using ‘Concurrence’

Fall 2020 **Quantum-like game development**
Mentors: Prof. Jae-yeol Hwang (PKNU) (only for class guidance)

- The word ‘Quantum-like game’ means a game made by applying the phenomenon to introduce to those who are not familiar with quantum physics.
- This project worked during the one of undergraduate classes, ‘Capstone Design I’
- My contributions: project idea suggestion, introducing concept of quantum-like games, GUI development
- Find more detailed information following Github team [repository](#).

Talks and posters

2021. 08. **[P]** Entanglement vs. mutual information
Roles of heterogeneity in non-equilibrium collective dynamics (RHINO) 2021 [link](#)

Technical skills

Programming languages

Python, C (a little bit), \TeX , Markdown

Software

\LaTeX , Git, Mathematica, Linux (usually Ubuntu)

Languages

Korean (mother language), English (intermediate level)

Activities

2017. 07. **PKNU-ISS (International Summer School) Program**
- Officially certified program by PKNU
 - Attended seasonal classes with abroad students who were enrolled to my university
 - To this program, my english skill has improved and felt their cultural difference
- Traveling abroad experiences**
- Vietnam (2016), Taiwan (2016), Japan (2018) and Italy (2020)