# RANDY STEFAN TANUWIJAYA

**B.Sc. in Physics-IRE and Computer Science**


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rstanuwijaya rstanuwijaya


## ACTIVE PROJECTS

### Fullstack Developer @ onQ! HackUST2021

**HKUST**

March 2021 – Ongoing Hong Kong

- Creative designer, idea originator, fullstack developer of onQ! (hackathon) project.
- Project description: "Translate your queue to a digital queue seamlessly. Start and check your queue remotely from your mobile phone. Top up your missed queue without worry."
- Source code on Github (some might be private at this moment): /rstanuwijaya/onq-hackust-web, /rstanuwijaya/onq-hackust-dashboard, /rstanuwijaya/onq-hackust-backend

### Metasurface in Low Light Regime

**Jensen Lab @ HKUST Phsyics**

August 2020 – Ongoing Hong Kong

- Final year Physics research projects
- Experiment and data analysis using PF-32 - Picosecond resolved single photon camera (camera that can tag the individual photon arrival time) for characterizing quantum optical metamaterial.
- Highlights: Quantum optics experiment and simulation, temporal image processing, python and mathematica
- Source code: /rstanuwijaya/pf32-python-analysis

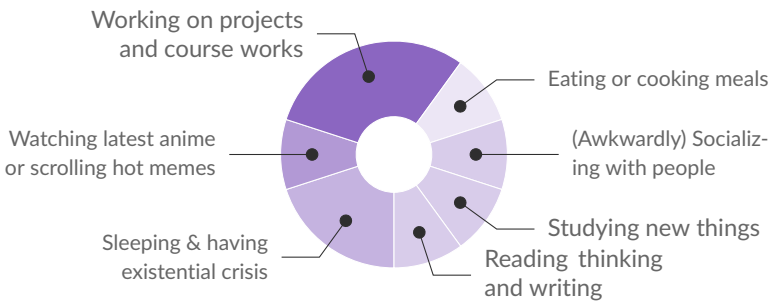
## EDUCATION

### B.Sc in Physics-IRE and Computer Science

**Hong Kong University of Science and Technology**

August 2018 - 2022

## A DAY OF MY LIFE




## ABOUT ME

*A curious student, a passionate physicist, and a hobbyist developer.*
*Loves cooking and watching movies.*
*"Think like a scientist, work like an engineer."*

## MOST PROUD OF

**Wholesome Personality**
Hardworking, responsible, and compassionate (but I'm an introverted person!)

**I'm a Proud Geek!**
I like studying, doing technical stuffs, organizing things, and making things run more efficiently!

**Good Sense of Humour**
Check.

**Achievements**
Silver Medal on Asian Physics Olympiad 2018, HKUST Admission-Scholarship, Consecutive Dean's List on HKUST

## SKILLS

Python for everything | LaTeX | MERN Fullstack | DevOps - AWS

Quantum Optics | Laser Alignment | Quantum Simulation

## LANGUAGES

**English**
**Indonesian**

# PAST PROJECTS

### All-Optical Neural Network

**Du Lab @ HKUST Physics**

January 2020 – August 2020 Hong Kong

- Remote research project during beginning of pandemic.
- Verifying the developed algorithm for all optical neural network
- Highlights: Laser Cooling, Electromagnetically Induced Transparency, Weighted-Gerchberg-Saxton Algoritm.

### FPGA Controlled Silicon Photonic Switch

**Photonic Device Lab @ HKUST ECE**

July 2019 - December 2019 HKUST

- Assisting silicon photonic chip device characterization experiment
- Developing feedback control system using Zedboard FPGA to control resonance system of Photonic chip
- Highlights: Microchip characterization, Xilinx Vivado, Verilog.

# VOLUNTARY WORKS

### Indonesian Election Organizing Committee

**Consulate General of The Republic of Indonesia in Hong Kong**

February 2019 – March 2019

- Working as the mailing committee of 2019 Presidential Election.