# **Fan Kwok Lung**

BSc(4) Year 3, The University of Hong Kong Double major in Decision Analytics and Physics (852)-68822106

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# **OVERVIEW**

Year 3 BSc student major in Decision Analytics and Physics interest in data science and astrophysics.

## **APPOINTMENTS**

Undergraduate Research Assistant Department Of Mathematic, The University of Hong Kong	01/2018-02/2018
• Implement convex optimization algorithm using C++	
Student Teaching Assistant  Department Of Computer Science, The University of Hong Kong  • Teaching COMP2123 Programming Technologies and Tools	09/2017-12/2017
• Course content include:shell script,C++ STL,C and python	
Student Intern  Nishina center for accelerator based science, RIKEN  • Nuclear physics and particle detector	07/2017-08/2017
<ul> <li>Summer Research Fellow</li> <li>Department of Physics, The University of Hong Kong</li> <li>CMB polarization and probabilistic catalog</li> <li>Supervised by Dr Meng Su</li> </ul>	05/2017-08/2017

# **EDUCATION**

The University of Hong Kong	
RESEARCH PROJECT	
CMB polarization foreground removal with hydrogen data $Supervised\ by\ Dr\ Meng\ Su$	01/2017-08/2017

Probabilistic catalog of Fermi LAT data

BSc,major in Decision Analytics and Physics

12/2016-Current

09/2015-Current

## Classification of Fermi LAT sources with machine learning

09/2017-Current

Supervised by Dr Stephen Ng and Dr Pablo Saz Parkinson (Directed Studies in Physics)

Using machine learning techniques for Gamma/Hadron separation in HAWC

02/2018-Current

Supervised by Dr Pablo Saz Parkinson and Dr Philips Yu

## **HONOR AND AWARD**

Professor C D Beling Memorial Prize in Physics

2016

## **SKILLS AND LANGUAGES**

#### Languages

- Native speaker of Cantonese and Mandarin
- Fluent in English

### Programming and Software

- Python(including scientific packages like Numpy, sci-kit learn and keras with tensorflow backend)
- *C/C++*
- R(including data visualization packages like ggplot and plotly)
- Linux and Shell script(With experience in Grid computing)
- Excel(Including Built in statistical function)
- Microsoft Offices
- LaTeX

#### Skills

- Data mining and machine learning
- Physics and mathematical modeling
- Statistic