# Dr. Chi Chung Alan, FUNG

PhD in Physics
Assistant Professor at the City University of Hong Kong
Place of Birth & Citizenship: Hong Kong

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## Education

*University Education:*

**PhD in Physics (HKUST)**
GPA: 10.29/12.0, Aug 2013

**Mphil in Physics (HKUST)**
GPA: 10.29/12.0, Aug 2010

**BSc in Math. & Phys. (HKUST)**
GPA: 10.08/12.0, Jun 2008

*Other Trainings:*

**Specialization in Deep Learning (DeepLearning.AI)**
Completion: 14 Feb 2021

**Specialization in Natural Language Processing (DeepLearning.AI)**
Completion: 2 May 2021

## Skills

*Computer Skills:*

**OS:** Windows and Linux
**Computer Languages:** C++, python (numpy, scipy, Tensorflow, nest), SQL, R, Bash, HTML, Latex, gnuplot, etc.
**Computational Skills:** Simulations, Machine Learning, Deep Learning, Natural Language Processing
**Other Skills:** Fault Diagnosis

*Mathematical Skills:*

Differential Equations, Algebra, Statistics, Numerical Methods

*Languages:*

| | |
|---|---|
| **Chinese** | |
| Cantonese | Native |
| Mandarin | Fluent |
| **English** | Fluent |
| **Japanese** | Intermediate |

## Profile

- A Quantitative Scientist Working on Computational Neuroscience
- Researches include Mathematical Models and Data Analysis

## Working Experience

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|---|---|---|
| **Assistant Professor** | CityUHK | 02/2022 – Present |
| Duties: Teaching and Research | | |
| **Staff Scientist** | OIST | 04/2019 – 01/2022 |
| Duties: Mathematical Modeling, Teaching, and Data Analysis | | |
| **Research Scientist** | RIKEN CBS | 04/2015 – 03/2019 |
| Duties: Mathematical Modeling and Data Analysis | | |
| **Postdoctoral Fellow** | HKUST | 10/2013 – 03/2015 |
| Duty: Mathematical Modeling | | |

## Achievements

*Research Fund:*

**Agency:** JSPS (Japan) **Project ID:** 19K16885
**Amount:** 4,290,000 JPY **Duration:** Apr 2019 - Mar 2023

*Notable Awards:*

- Department Research Award (2013), HKUST
- Best TA (2011), HKUST
- Young Researchers Forum Best Project Presentation Award (2011), The 3rd International Conference on Cognitive Neurodynamics

*Publications:*

**Twenty-two** academic papers: **One** Review, **15** Original Research Articles, **six** Notable Conference Proceedings (**Four** in NIPS, a top AI Conference)

## Selected Publications

**Discrete-attractor-like tracking in continuous attractor neural networks**
First-authored. *Physical Review Letters* **122** 018102 (2019)

**Perisaccadic receptive field expansion in the lateral intraparietal area**
Co-first-authored. *Neuron* **90**(2) 400-409 (2016)

**Delay Compensation with Dynamical Synapses**
First-authored. NIPS2012, Spot-light Presentation