Ho Yin Chau

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EDUCATION

University of California, Berkeley, Berkeley, CA

B.A. Molecular & Cell Biology (Neurobiology track), 2016 – 2020

B.A. Physics (Honors), 2016 – 2020 B.A. Mathematics, 2016 – 2020

- Minor in Computer Science
- Minor in Creative Writing
- GPA: 3.91/4.0

RESEARCH EXPERIENCES Redwood Center for Theoretical Neuroscience, Berkeley, CA, Spring & Fall 2019

- Undergraduate Researcher, working with Prof. Bruno Olshausen
- Unsupervised learning and inference in hierarchical Bayesian networks

Summer Undergraduate Research Program in Computational Neuroscience, Center for the Neural Basis of Cognition, Pittsburgh, PA, Summer 2019

- Participant, working with Prof. Tai-Sing Lee & Dr. Wenhao Zhang
- Computational modelling of 'opposite neurons' in MSTd

Deep Learning DeCal, Machine Learning @ Berkeley, Berkeley, CA, Fall 2017

- Participant, collaboration with Brandon Trabucco & Ani Nrusimha
- Independent research topic: "Neural Program Synthesis Using Variational GAN"

Undergraduate Research Apprentice Program, UC Berkeley, Berkeley, CA, Sept 2016 – Aug 2017

- Participant, working with Prof. Kam-Biu Luk at the Lawrence Berkeley National Laboratory
- Calibrating cosmic muon detector, writing Monte Carlo simulations, testing liquid scintillator

PREPRINTS

H.Y. Chau, W.H. Zhang, T.S. Lee, *Emergence of opposite neurons in a firing-rate model of multisensory integration*. bioRxiv 814483; doi: https://doi.org/10.1101/814483 (preprint)

POSTERS

H.Y. Chau, X.Y. Niu, W.H. Zhang, T.S. Lee, *Emergence of opposite neurons in a circuit for multisensory processing*. Computational and Systems Neuroscience Workshop (COSYNE) 2020, Denver, CO. Feb 27, 2020.

SELECTED AWARDS & HONORS L. Jackson Laslett Scholarship, UC Berkeley Physics, 2019 – 2020

Jim and Donna Gray Award, UC Berkeley Electrical Engineering & Computer Science, 2018 – 2019

Olsen Memorial Fund Award, UC Berkeley Physics, 2018 – 2019

Dean's Honors, UC Berkeley, 2017 – 2019

The Cal Hacks Fellowship, Cal Hacks 4.0, 2018

Hong Kong Scholarship for Excellence Scheme, HKSAR Education Bureau, 2016 – 2020

OTHER

Icebox, Berkeley, CA, 2018

EXPERIENCES & PROJECTS

- Co-founder, Software Engineer (iOS developer), working with Jasmine Singh & Julia Yu
- Startup in grocery management, admitted into Skydeck incubation track in summer 2018

Video Game Design and Development DeCal, Game Design and Development at Berkeley, Berkeley, CA, Spring 2018

• 2D adventure PC game developed: Arkangel

COMUNNITY OUTREACH

ExperiMentors, Diocesan Boys' School, Hong Kong, China, 2015

- Co-founder, Secretary
- Non-profit student organization holding science summer camps for primary school students