




EDUCATION

- University of Illinois at Urbana-Champaign** **2018.08 – Exp. 2020**
M.Sc. in Computer Science (Advisor: Prof. Karrie Karahalios & Prof. Aditya Parameswaran)
- The Chinese University of Hong Kong** **2013.09 – 2017.12**
B.Sc. in Computer Science (Advisor: Prof. James Cheng)
- Final Year Project: "Efficient Nearest Neighbors Search in Distributed Manner."
Minor in Business Economics
- University of Illinois at Urbana-Champaign** **2015.01-2015.06**
Exchange Student, Computer Science Department
- Princeton University** **2016.10**
Short-term Exchange Visiting Student, Whitman College

LANGUAGE & SKILLS

Programming: Python, C/C++, Java, JavaScript, HTML/CSS
Technologies: [SQL/MySQL](#), [MongoDB](#), Node.js, Express.js, React.js, Flask, Pandas, Scikit-Learn, Luis.ai
Other Skills: Photoshop, Photography, Teaching



WORK & TEACHING EXPERIENCE

- Research Assistant**  Exp. Jan 2019 – Exp. May 2019
DataSpread Project - Computer Science Department, University of Illinois at Urbana-Champaign Illinois, USA
- Teaching Assistant** – *CS242 Programming Studio* Aug 2018 – Exp. Dec 2018
Computer Science Department, University of Illinois at Urbana-Champaign Illinois, USA
- Conduct discussion sessions and oversee 250+ students and 10+ course assistants with 4 other TA
- Assistant Engineer** – *Natural Language Processing R&D* May 2018 – Aug 2018
Research and Development Center, Machine Learning Team, KKBOX Group International Limited Taiwan
- Conducted survey and model training for [natural language processing](#) algorithms
- Designed test cases and data preparation for smart speaker implementation
- Research Student & Summer Research Intern** - *Algorithm Implementation and Research*  Dec 2015 – Dec 2017
Husky Lab - Machine Learning Team, The Chinese University of Hong Kong (Supervisor: [Prof. James Cheng](#)) Hong Kong
- Conducted research on [distributed hash-based nearest neighbor search algorithms](#)
- 15 % more efficient with designed [Image Retrieval](#) system that is more scalable compared to OpenCV FLANN  
- Teaching Assistant** - *CSCI 2040 : Introduction to Python* Sept 2017 – Dec 2017
Computer Science and Engineering Department, The Chinese University of Hong Kong Hong Kong
- Web Administrator** - *Update and maintain website*  Jan 2016 – May 2017
Research Institute for the Humanities, The Chinese University of Hong Kong Hong Kong
- Summer Research Intern** – *Data Collection and Analysis*  July 2015 – August 2015
Internet Security Team, National Center for High-Performance Computing (Supervisor: [Prof. Ann, Hsing-Yen](#)) TN, Taiwan
- Developed the Bad Domain Tracking System: retrieves and analyzes malicious fast-flux domains caught by honeypots
- Presented visualized results and is presented by team member at HoneyCon 2015 in Taipei (talk by Lee, Bo-Yi)

PUBLICATION

Jinfeng Li, Xiao Yan, Jian Zhang, An Xu, James Cheng, Jie Liu, Kelvin K. W. Ng, **Ti-chung Cheng**: "A General and Efficient Querying Method for Learning to Hash." SIGMOD Conference 2018: 1333-1347

SELECTED PERSONAL TECHNICAL PROJECTS

- [Data Science] Exploring Potential of Asian Low-Cost Carriers Forming Strategic Alliance**
Individual research on the aviation industry in areas of decision science using computer science techniques  
- Designed an evaluation metric with a Python scraper for Asian low-cost carriers through decision science research
- Supervisor: Dr. Yuen, Andrew Chi-lok, currently collaborating on a working paper

[Web] The Official Website for CUHK Taiwanese Student Association [↗](#)

Leader of The Open Community Project, running MongoDB, Express.js and React.js using Isomorphic framework

- Responsible for product management, software and database design and back-end development with a team of 10
- Implemented 20+ API maintenance and database design, working on user authentication/authorization development

[Web] Belayzee: A sharing-economy & crowd-sourcing concept service platform [↗](#)

Featuring shared economy of personal free time to form communities. Running MongoDB, express.js and EJS.

- Responsible for full-stack development and leads a team of five.

[Chatbot] Anna: group formation chatbot

Hackathon Project. A chatbot to assist hobbyist & interest group within campus using MEN stacks & Luis.ai.

- Responsible for over 10+ API for front-end development and Luis.ai training, lead a team of 4

[Chatbot] Rachel: friends and family health-centered chatbot

Hackathon Project. A chatbot to integrate calendars with health conditions of families using MEN stacks and Luis.ai.

- Responsible for over 30+ back-end APIs and lead a team of 4

[Android] Secure Taipei: A social security alerting service

Hackathon Project. An android application that uses open-data to assure user security.

- Responsible for database design, data-scraping and data cleaning using Python

EXTRA-CURRICULAR & SERVICES

Rifleman (Private)

The Republic of China Army

- Compulsory military training for male citizen

Jan 2018 – April 2018
Taiwan

Initiator and coordinator

The Circle Group: *connecting CS and non-CS students academically through sharing*

- Manages a team of 20+ students working on The Circle Project and official website for Taiwanese Student Association
- Created a guide for incoming freshmen with over 6000+ views
- Hosted 21 workshops, lectured 13 of them on Python and web applications
- Invited over 30 speakers from various disciplines that served over 1000+ audiences and the project is still running.

Oct 2016 – Dec 2017
Hong Kong

Information Officer

The Chinese University of Hong Kong, Taiwanese Student Association

- Launched the organization's online service and homepage.
- Assisted with technical setups for activities by the student association.

Oct 2015 – Oct 2016
Hong Kong

Project Coordinator and Volunteer

The Chinese University of Hong Kong, Morningside College

- Volunteered in Nepal to understand and evaluate needs of local people and provide solutions
- Volunteering proposal approved by the university with funding support
- Awarded Reaching Out Award & Scholarship and represented the university for press conference
- Awarded Taiwan Ministry of Education 2015 National iYouth Best Writing in Volunteering

Oct 2013 – May 2014
Nepal & Hong Kong

AWARD

The Chinese University of Hong Kong Morningside College 2017 Master's List

2017

The Chinese University of Hong Kong Morningside College Academic Scholarship 2016-17

2017

Taiwan Ministry of Education 2015 National iYouth Best Writing in Volunteering

2015

HKSAR Government Reaching Out Award and Scholarship 2013-14

2014