Kuan-Wei **Ho**

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Motivation and Interest

Looking for a master degree in computer science related study in a prestigious university.
Interested in data science, machine learning (ML), deep learning (DL), natural language processing (NLP), computer vision (CV), robotics and their applications.

Education

National Tsing Hua University *Hsinchu, Taiwan*

B.Sc. in Computer Science *Sep. 2014 - Jun. 2018*

- Selected Relevant Coursework: Calculus, Discrete Mathematics, Digital Logic Design, Data Structure, Linear Algebra, Computer Architecture, Probability, Graphics Programming and Applications, Operating Systems, Design and Analysis of Algorithms, Large-Scale Machine Learning, Compiler Design, Computer Graphics, The Cutting Edge of Deep Learning, Natural Language Processing Lab

Professional Experience

NVIDIA *Taipei, Taiwan*

AI Developer Technology Engineer Intern *Aug. 2018 - PRESENT*

- Study, develop and perform in-depth analysis and optimization of cutting-edge techniques in deep learning especially object detection and semantic segmentation methodologies on current and next-generation GPU architectures
- Work with mentors on understanding the current and future problems the key customers are solving and providing best AI solutions using GPUs
- Collaborate closely with the architecture, research, libraries, tools, and system software teams at NVIDIA to influence the design of next-generation architectures, software platforms, and programming models

Elsa Lab, National Tsing Hua University *Hsinchu, Taiwan*

Research Assistant (Supervised by Prof. Chun-Yi Lee) *Feb. 2018 - PRESENT*

- Conduct research on topics regarding video segmentation, robotics and deep reinforcement learning
- Responsible for methodology design and experiments implementations, evaluations and visualizations
- Responsible for editing and writing papers aimed at international conferences and journals in computer science related area especially regrading artificial intelligence and deep learning

Alfred Labs Inc. *Taipei, Taiwan*

Data Science and Machine Learning Intern *Dec. 2017 - Jun. 2018*

Alfred Camera is #1 mobile app service on App Store and Google Play in home security category in the United States. It turns old smartphones into surveillance cameras and offers services for over 7 million families around the world

- Conducted research on deep learning frameworks for mobile phones (e.g. TensorFlow Lite, TensorFlow Mobile, CoreML), and computationally efficient image classification, object detection, and face recognition methodologies implemented under those frameworks
- Conducted research on cutting-edge deep learning frameworks and toolkits designed for mobile embedded devices (e.g. Raspberry Pi), such as Intel Movidius Neural Compute Stick and Google AIY Vision Kit

Courses: Introduction to Programming, National Tsing Hua University *Hsinchu, Taiwan*

Teaching Assistant *Sep. 2017 - Jun. 2018*

- Assisted Prof. Hwann-Tzong Chen in teaching and relevant tasks
- Designed exams and built course project frameworks regarding basic C/C++ programming, data structures and algorithms
- Answered questions during class time, office hour or on on-line course forum

High5.ai *Taipei, Taiwan*

Software Developer Intern *July. 2017 - Oct. 2017*

High5.ai is the biggest B2B startup supporting customer service with AI chatbot on Facebook Messenger for more than 1000 customers in Taiwan and Southeast Asia, and also an excellent member of AppWorks #14 Accelerator program

- Focus on AI chatbot's production efficiency and research regarding semantic analysis and text generation
- Solved technical issues of the product and maintained the operation of the service

AI Lab, National Tsing Hua University *Hsinchu, Taiwan*

Undergraduate Researcher (Supervised by Prof. Von-Wun Soo) *Feb. 2017 - Jan. 2018*

- Built an AI agent telling Chinese stories based on MIT Media Lab's ConceptNet 5 by Monte Carlo tree search and sequence-to-sequence learning
- Conducted research on Monte Carlo tree search, AI storyteller agent model, Chinese linguistic, natural language processing and deep learning especially neural machine translation and text generation

Publication

Visual Relationship Prediction via Label Clustering and Incorporation of Depth Information

Hsuan-Kung Yang, An-Chieh Cheng*, **Kuan-Wei Ho***, Tsu-Jui Fu, Chun-Yi Lee

1st Person in Context (PIC) Workshop, European Conference on Computer Vision (ECCV), 2018.

* indicates equal contribution

(ECCV is a top conference in computer vision)

Awards and Honors

2018	**2nd Place**, ECCV 2018 Workshop and Challenge: Person In Context (PIC)	*Munich, Germany*
2017	**3rd Prize**, Final Project Competition of NTHU The Cutting Edge of Deep Learning	*Hsinchu, Taiwan*

Skills

Programming Languages, Frameworks, Tools and Languages

Programming Languages, Frameworks, Tools and Languages

- **Programming Languages:** C, C++, Python, Java, Matlab
- **Frameworks and Tools:** LaTex, Git, Flask, OpenGL, Android Studio
- **Data Science and Machine Learning Frameworks:** NumPy, Pandas, Gensim, OpenCV, NLTK, Scikit-learn, Keras, TensorFlow, PyTorch
- **Toolkits:** Raspberry Pi, Google AIY Vision Kit, Intel Movidius NCS
- **Languages:** Native - Chinese; Proficient - English; Rudimentary French
- Be able to work on **Windows, Linux, Mac OS**