

Haicheng Wang

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<https://hawang95.github.io>

EXPERIENCE

- **Samsung Toronto AI Center** Toronto, Canada
Machine Learning Engineer *Feb. 2020 - now*
 - **Role:** Researching, implementing, improving and evaluating Deep Learning methods applied to R&D projects for Samsung Electronics. Developing model prototypes and other modules for Machine Learning applications. (**Pytorch, TensorFlow, Python, Bash**)
- **ModiFace** Toronto, Canada
Machine Learning Research Internship *May. 2019 - Dec. 2019*
 - **Role:** Searching and evaluating Deep Learning methods applied to virtual reality applications. Developing new algorithms & models for faster and higher performance of the services. (**Pytorch, Python, Bash**)
- **Vector Institute** Toronto, Canada
Research Engineer *Jan. 2019 - May. 2019*
 - **Instance segmentation project:** Implementing performance enhancement plan (including models, pre-processing methods, self-defined objective functions) as requested by researchers. (**Pytorch**)
- **Department of Computer Science, University of Hong Kong** Hong Kong, China
Research Assistant *Jan. 2017 - Jun. 2018*
 - **HKU-Face:** Final year project related to **Face Recognition** with Deep Learning; **70M** facial images were collected with novel filtering processes. (**Python, C++**)
 - **Small Domain Image Classification:** Based on high-resolution GAN-augmented data, we achieved a reduction of **38%** error of state-of-the-art model in **Oxford-102** dataset was achieved. (**C++, Python**)

PROJECTS

- **Caffe-iOS:** Adapted Caffe framework on **iOS** devices. Enable iPhone 8 to perform CPU inference **4x faster** than MacBook Pro(i5 4308U) for CNN, RNN models. (**C++, Objective-C, Metal**)
- **Chainer2Caffe, MXNet2Caffe:** Tools to transfer Model & Parameter from Chainer, MXNet to Caffe. (**Python**)
- **Curiosity-RL:** Course Project on Deep Reinforcement Learning at UofT. Designing and evaluating several novel curiosity rewards for model-based Reinforcement Learning. (**Python**)
- **Google Image Downloader:** Open source project of image crawler with stableness, easy deployment and awareness of anti-bots. (**Python**)
- **Staff Development Platform:** A maintainable prototype of online learning platform in **Django**. (**Python, JavaScript, HTML**)

EDUCATION

- **University of Toronto** Toronto, Canada
Master of Science (Applied Computing) in Computer Science. 4.0/4.0. *Sep. 2018 - Dec. 2019 (estimated)*
- **University of Hong Kong** Hong Kong, China
Bachelor of Engineering (Computer Science); 3.67/4.3 First Honor. *Sep. 2014 - Jun. 2018*
- **Shanghai Jiao Tong University** Shanghai, China
Summer Exchange; 90/100. *Jul. 2015 - Aug. 2015*

SKILLS

- **Languages:** Python, C++, Java, C, MATLAB, JavaScript, Haskell, HTML, MySQL
Techniques: Linux, CMake, Django, Design Pattern, Ajax
- **Deep Learning:** PyTorch, Caffe, Keras, TensorFlow, MXNet, Chainer, CUDA