Haicheng Wang

Toronto, ON, Canada; +1-647-878-1912

Email : hcwang.1995@gmail.com

https://github.com/hcwang95

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*

EXPERIENCE

- **ModiFace** — Toronto, Canada
  Machine Learning Research Internship — *May. 2019 - now*
  - **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 Toronto** — Toronto, Canada
  Teaching Assistant — *Sep. 2018 - Apr. 2019*
  - **CSC369 Operating System**: Leading tutorials, marking assignments & tests, holding office hours etc.

- **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**)

- **Hop Hing Kitting Factory** — Hong Kong, China
  Software engineer — *Apr. 2016 - Oct. 2016*
  - **Data Collection**: Building multi-process software to get real-time, structured financial data.(**Python, Bash**)
  - **Data Analysis**: Running customized GPU algorithm for market data and making decisions and achieved fully algorithmic decision-making process. (**Python**, **C++**, **CUDA**)

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**)

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