Ting-Yuan Hsia

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Education

Santa Clara Univeristy, Santa Clara, CA, USA — Sep. 2017 - Jun. 2019
Master of Science in Computer Science and Engineering — GPA: 3.63 / 4
- Related Courses: Algorithm, Operating Systems, Data Mining, Cryptology, Computer Networks, Distributed Systems

National Taiwan University, Taipei, Taiwan — Sep. 2014 - Jun. 2016
Master of Science, Department of Electrical Engineering
- Master thesis: "Scheduling-Aware Data Prefetching Based on Spark Framework".
- Related Courses: Machine Learning, Artificial Intelligence, Fault Tolerant Computing, Network and Computer Security

National Taiwan University, Taipei, Taiwan — Sep. 2010 - Jun. 2014
Bachelor of Science in Engineering, Department of Electrical Engineering
- Related Courses: Data Structure and Programming

Experience

Software Development Engineer — Jul. 2019 - Present
NetApp, Inc. — Sunnyvale, CA, USA
- Develop and maintain ONTAP data protection technology including SnapMirror, SnapDiff, Volume Move.

Software Engineer Intern — Jun. 2018 - Sep. 2018
Facebook, Inc. — Menlo Park, CA, USA
- Developed a cache service from scratch for an internal system and it reduced page loading time by 60%.
- The cache service was implemented in C++ and contains a Thrift interface which can be queried from PHP, C++ and Python clients.
- Modified both back-end service and frontend user interface for pagination capability.

Software Engineer — Jan. 2013 - Jul. 2016
Zuvio Inc. — Taipei, Taiwan
- Developed and maintained client-side products including PowerPoint Add-ins and desktop applications from scratch using C#, XAML, WPF and VSTO.

Teaching Assistant — Feb. 2016 - Jul. 2016
National Taiwan University, Department of Electrical Engineering — Taipei, Taiwan
- Graded and assisted students in EE 4052, Computer Programming.
- Assisted 50 students with their assignments, questions and projects.

Projects

Scheduling-Aware Data Prefetching Based on Spark Framework
- Proposed a scheduling-aware data prefetching mechanism.
- By evaluation, the mechanism reduced 14% and 17% Spark execution time with 25 GB and 50 GB datasets.
- The prefetch mechanism was based on Spark task scheduling, data was prefetched to cache just before it will be processed.
- Accepted by IEEE Transactions on Parallel and Distributed Systems and The 31st IEEE International Conference on Advanced Information Networking and Applications (AINA-2017).

FileBox
- A full functional Dropbox application with 540,000+ downloads on Windows Phone platform.
- FileBox is available on Microsoft Store: https://www.microsoft.com/en-us/store/p/filebox/9wzdncrfj0nd?rtc=1

Car Classifier
- A Convolution Neural Network (CNN) based neural network image classification system.
- Used Keras and TensorFlow to train the classification model; used Django and Python to develop the classifier website. Demo classifier website was deployed on Microsoft Azure.

Skills

Programming Languages
- C#: WPF, Windows Forms, Windows Phone Application Development, VSTO
- C++: Google Test, folly, Thrift
- PHP: HHVM, Hack, XHP, WordPress, Laravel
- Python: Django, Keras, TensorFlow, Theano
- Ruby: Ruby on Rails, Sinatra
- Java, Scala, Shell Script
- Source control: git, Mercurial

Big Data Frameworks
- Hadoop, Spark, Alluxio

System Management
- Cloud Services: Microsoft Azure, Amazon Web Service, Google Cloud Platform, Heroku
- Operating Systems: Windows Server, Red Hat Enterprise Linux, CentOS, Debian, Ubuntu
- Virtualization Frameworks: VMware ESXi, Hyper-V, Xen
- Databases: MySQL, MS SQL, PostgreSQL, Oracle, MongoDB
- Web Servers: Apache, NGINX, IIS