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OBJECTIVE

To obtain a software developer intern utilizing my skills in **Mobile, Cloud** and **Data Science**.

EDUCATION

Carnegie Mellon University, Pittsburgh-Silicon Valley | Aug.2014 – Dec.2015 (Expected)

*M.S. of Information Technology, **Mobility**, Information Network Institute*

➤ **Completed Course:** 15213 Computer System/ 15619 Cloud Computing/ 15640 Distributed System
14740 Computer Networks/ 14741 Information Security

➤ **Ongoing Course:** 14836 iOS Mobile Development / 96822 Mobile Ecosystem
95706 Objected Oriented Analysis & Design / 11601 Coding Boot-Camp

Fudan University, Shanghai, China

| Sept.2005 – Jul.2008

*M.S. of Electronic Engineering, **Image Processing & Artificial Intelligence Lab***

➤ **Digital Image Processing System based on Neural Network and DWT/DCT (C++/Matlab)**

Fudan University, Shanghai, China

| Sept.2001 – Jul.2005

*B.S. of Electronic Engineering, **Excellent Graduate Student(Top 10%)***

SKILLS

Programming: Java/C++(**Proficient**) C/Matlab/Ruby/Objective-C (**Intermediate**) HTML/CSS/Javascript/Python(**Beginner**)

Knowledge: **Android/iOS/Amazon AWS/Hadoop/OOA&D/Web Application/MySQL&PostgreSQL/HTTP&TCP/UDP**

ACADEMIC PROJECT

- **Twitter Analytic RESTful Web Service** (Java/Python/MySQL/HBase + AWS) - **CMU, 15619 Cloud Computing**
 - ◇ Designed and implemented large-volume data(1TB) processing web service using **WebApp + ETL(JSON) + MySQL/HBase**, which provides high-throughput demanding queries, using **Amazon Web Service**(EC2, S3, ELB, ASG, etc.,)
- **Map-Reduce Engine** (Java) - **CMU, 15640 Distributed System**
 - ◇ Designed and implemented a simplified **Map-Reduce** and **HDFS** Framework which is similar to **Hadoop**, comprised of JobTracker, TaskTracker, Mapper/Reducer/Combiner and can process large volume data in a distributed environment
- **RMI(Remote Invocation Method) Facility** (Java) - **CMU, 15640 Distributed System**
 - ◇ Designed and implemented a facility similar to **Java RMI**, object method can be looked up and remotely invoked
- **Parallelized Clustering Analysis using OpenMPI** (Java) - **CMU, 15640 Distributed System**
 - ◇ Parallelized clustering algorithm(K-means) using **OpenMPI** and compare the performance with sequential version.
- **MiniSQL Database Engine** (C++/C) - **CMU, 15615 Database Application**
 - ◇ A MiniSQL which supports creating table, **B+ tree index** creating, selecting from, insert, delete records queries library.
- **Cached Web Proxy** (C++/C) - **CMU, 15213 Computer System**
 - ◇ Designed and implemented a **multithread** Web Proxy based on **HTTP 1.0** with **LRU Cache**.

WORK EXPERIENCE

➤ **Mobile Software Engineer, Sony Japan(HQ) , Cloud Service Application Department** | Nov.2008 – June.2014

Design and develop **application/framework/platform** software on **Android/Linux** hybrid system for next-generation cameras, providing photography application download service and connection with Smart Phone, Tablet, Smart Watch using Wifi, NFC

WORK PROJECT

- **PlayMemories(Android) Smart Camera Apps** - **Sony Japan** | Nov.2011 – June.2014
<https://www.playmemoriescameraapps.com/portal/> (Official Website)
<https://www.youtube.com/watch?v=3II4EBcilOQ> (CM)
Responsibility: (Java - JNI - C++/C)
 - ◇ Designed and developed **application** and **framework**, on which more than 20 apps(SmartRemote, etc.,) released.
 - ◇ Designed and developed **platform** and new features **APIs** on **Android/Linux** system
 - ◇ *Japanese Good Design Awards 2013/ Sony Imaging Group Challenging Awards 2012(Top 3)*
- **Android/Linux Common Software Platform** - **Sony Japan** | Nov.2010 – Oct.2011
Responsibility: (C++/C)
 - ◇ Designed and developed large-scale software platform for next-generation digital camera/camcorder using **OOA/OOD, MVC, Design Pattern, FSM** based on **SDLC**
- **Image/Video Compression System** - **Sony Japan** | Nov.2008 – Oct.2010
Responsibility: (C++/C/Ruby)
 - ◇ Researched, designed and developed image/video compression algorithm for next-generation digital cameras using **open sources** JM, FFMpeg and based on standards **HEVC/AVC/MPEG2/JPEG2000/JPEG**
 - ◇ *One patent on image compression algorithm utilized in Sony Digital Cameras*