4337 Renaissance Dr, Apt#116
San Jose, CA 95134
Tel: 412-916-6539

Kailiang(Bright) Chen

kailianc@andrew.cmu.edu
Personal Website : www.kailiangchen.me

OBJECTIVE

To obtain a software developer utilizing my skills in **Mobile, Cloud and Multimedia.**

EDUCATION

Carnegie Mellon University, Pittsburgh-Silicon Valley / *Aug.2014 – Dec.2015 (Expected)*
M.S. of Information Technology, Mobility, Information Network Institute ***GPA: 3.4 / 4.0***

➢ ***Completed Course:*** 15619 Cloud Computing/ 15640 Distributed System /15213 Computer System
15615 Database Application/ 14837 Java Smart Phone(Android) Development /
14836 iOS Mobile Development / 96822 Mobile Ecosystem /
95706 Objected Oriented Analysis & Design / 14740 Fundamentals of Computer Networks

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++/C/**Matlab/Ruby/Objective-C/HTML/CSS/Javascript
Knowledge: **Amazon AWS/Hadoop/MySQL&PostgreSQL/**Android/iOS/OOA&D/Web Application/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

➢ **Software Engineer, Sony Japan(HQ) , Common Software Framework 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=3Il4EBcilO0 (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*