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Kailiang(Bright) Chen

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OBJECTIVE

To obtain a full time software developer position utilizing my skills in **Mobile, Cloud and Backend**.

EDUCATION

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

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

- **Courses:** 15619 Cloud Computing/ 15640 Distributed System /15213 Intro to Computer System
14837 Java Smart Phone(Android) / 14836 Mobile Game Development(iOS) / 14839 Mobile Ecosystem /
18797 Machine Learning for Signal Processing / 95706 OOA&D / 14740 Computer Networks

Fudan University, Shanghai, China

/ Sept.2005 – Jul.2008

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

Fudan University, Shanghai, China

/ Sept.2001 – Jul.2005

B.S. of Electronic Engineering, Excellent Graduate Student

SKILLS

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

Knowledge: **Android/Amazon AWS/Hadoop**/OOA&D/MySQL/iOS/Web/HTTP/Neural Network/Computer Vision

ACADEMIC PROJECT

- **PicKick - a Cloud-based Photo/Video App (Android/HTTP/MySQL + MongoDB) - CMU, 14837 Java Smart Phone**
 - ◇ Designed and implemented a Cloud-base photo/video web service for remotely storage and search using Android client(AsyncTask/ContentProvider/SQLite) - HTTP/JSON - Web Service(MySQL/MongoDB) and Google Map API v2.
- **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
- **SpaceMonkey - a iOS Shooting Game (Objective-C) - CMU, 14836 Mobile Game**
 - ◇ Designed and implemented a 2D infinite shooting game on iPhone & iPad using Cocos2D and SpriteBuilder engine
- **MiniSQL Database Engine (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++) - CMU, 15213 Intro to Computer System**
 - ◇ Designed and implemented a multithread Web Proxy based on HTTP 1.0 with LRU Cache.

WORK EXPERIENCE

- **Mobile Software Engineer Intern, NVIDIA(HQ), Mobile(Tegra) Software Department** | June.2015 – Aug.2015
 - ◇ Research, design and implement new visual computing features for Camera App on Android Shield tablet
- **Mobile Software Engineer, SONY Japan(HQ), Common Software Department** | Nov.2008 – June.2014
 - ◇ Design and develop **app/framework** software on **Android/Linux** hybrid system for next-generation cameras, providing photography application download service and connection with Smart Phone, Tablet, Smart Watch

WORK PROJECT

- **SFM based 2D/3D Reconstruction Android App - NVIDIA** | June.2015 – August.2015
Responsibility: (Java - JNI- C++)
 - ◇ Researched and deployed **Structure from Motion** algorithm pipeline using Android NDK/open source libraries
 - ◇ Designed and implemented a **3D Photo Generation Android App** using OpenGL ES/OpenCV on Tablet
- **Playmemories(Android) Smart Camera Apps - SONY(Japan)** | Nov.2008 – June.2014
<https://www.playmemoriescameraapps.com/portal/> (Official Website)
<https://www.youtube.com/watch?v=3II4EBcIlOQ> (CM)
Responsibility: (Java - JNI- C++)
 - ◇ Designed and developed features(UI/Core Service/Network, etc..) on **framework and application**(> 20 apps released)
 - ◇ Designed and developed large-scale common software hybrid platform using **OOA/OOD, MVC, Design Patterns**
 - ◇ *Japanese Good Design Awards 2013/ Sony Imaging Group Challenging Awards 2012(Top 3)*