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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.

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 OOAD / 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/AWS/Hadoop/OOA&D/MySQL/JDBC/Servlet/JSP/Web/HTTP/Machine Learning/Computer Vision

### **WORK EXPERIENCE**

Mobile Software Engineer Intern, NVIDIA(HQ), Mobile(Tegra) Software Department | June.2015 - Aug.2015

- Research, design and implement new visual computing features on Android Shield tablet and game console
- SONY Japan(HQ), Software Design Group/Cloud Service | *Nov.2008 – June.2014* 
  - Design and develop user & system app, framework for 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) Camera Apps

- **SONY(Japan)** | Nov. 2008 – June. 2014

https://www.playmemoriescameraapps.com/portal/ (Official Website)

https://www.youtube.com/watch?v=3II4EBcilO0 (CM)

Responsibility: (Java - JNI - C++) (worked on three teams - user app/system app/platform)

- Designed and developed connecting/recording/editing user application such as SmartRemote, TimeLapse, etc,.
- Designed and developed system application such as Launcher, Market, AppManager, Keyboard, etc,.  $\Diamond$
- Designed and upgraded platform features for PackageManagerService, ActivityManagerService, WifiService, etc.,

# **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(AsynTask/ContentProvider/SQLite) - HTTP/JSON - Web Service(MySQL/MongoDB) and Google Map API v2.
- Car Configuration Client/Server Application (Java/Servlet/JDBC/MySQL) - CMU, 14837 Java Smart Phone
  - Designed and implemented a client-server system for a car configuration application similar to http:// www.kbb.com/ in Java using Apache Tomcat, JSP, Servlets, JDBC/MySQL(CRUD) with OOP design principles.
- 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