

## **Industry Experience**

Computer software service Computer and peripheral equipment manufacturing

#### **Functional Experience**

System Analysis Software Architectural Design **Programming** 

## **Systems Experience**

**MvSQL** 

J2EE/J2ME/J2SE

**JavaScript** 

JSP HTML

C

C# Java

Spring framework

**RESTful WebServices** 

Scala

Go Scrum

Microsoft Azure

Mongo DB

Android

Cassandra intelligent algorithms

Data mining

Computer human interaction

#### **Education**

2005 - 2009

**National Chiao Tung** University, Hsinchu, Taiwan Ph.D., Electronic & Control

2003 - 2005

I Chaoyang University of Technology, Taichung,

**Taiwan** 

Master, Computer and Information Sciences

Languages

Mandarin, Native English, Professional working

proficiency

**Personal Information** 

Birthday: Dec. 14, 1978

## **Eric Hsu**

## **Relevant Business Experience:**

- Solid academic background with 8+ years progressive and professional experiences related to execute several Android, iOS, web front end, web backend, and IOT projects.
- Accumulated many experiences on management, leading projects, and developing reusable software architecture.

## **Relevant Career Experience:**

02/2016 – 01/2017	Mattel Inc. (Fuhu Division), Taipei Director Of Software Development
10/2015 - 02/2016	Fuhu Taiwan Inc, Taipei Director Of Software Development
06/2014 – 10/2015	Fuhu Taiwan Inc, Taipei Senior Manager of Software Development
01/2014 - 06/2014	Quanta Computer Inc., Taoyuan <i>Manager</i>
06/2013 - 12/2013	Quanta Computer Inc., Taoyuan Technology Manager
06/2011 - 06/2013	Quanta Computer Inc., Taoyuan Assistant Manager
10/2009 - 06/2011	National Central University, Taoyuan Post Doctoral Research Fellow
10/2008 - 06/2011	PCSchool Senior Instructor

#### Eric Hsu



#### **EXPERIENCE**

# 02/2016 – 01/2017 Mattel Inc. (Fuhu Division), Taipei Director Of Software Development

#### 1. 40% for Management

- a. Spin off seven teams and let each team leader can take over their owned team within two months.
- b. Make the team development direction by using SMART principle to let them clearly indicate their goals.
- c. Make a staffs training plan with team leaders to let everyone know about their developing direction and keep monitoring their development by weekly sync meeting.
- d. Support the migration plan to make sure no one resign during the migration.

## 2. 40% for Project development

- a. Apply middleware experience to save the effort to build the communication between server and client from several weeks to few days.
- b. Apply CAP principle to evaluate which database needs to use to prevent redesign efforts. Also, the argument days can be reduced from about 2 weeks to few days.
- c. Apply design patterns to software development to reduce development efforts (i.e. reduce 60% efforts to develop similar components).
- d. Try different view point (i.e. UX, SA, front end, and backend) to drive project execution and modify of project execution flow to improve the cooperation performance (i.e. reduce 20% of redundant communication) with multiple teams.
- e. Apply SDK design principle (i.e. non sequential and repeatable) to design SDK to allow third party or other teams can process our systems.

#### 3. 20% for Research

- a. Extended DRM solution for printed file to save \$100,000 outsourcing cost.
- b. Developed Cloud based Voice Dialog System to reduce the effort to generate single user scenarios from 5 days to 1 day.
- c. Use one month part time effort to develop the Reporting System to save at least 3 engineers' full time efforts.
- d. Trace defects of the billing system to find out the solution to prevent arbitrary refund risk.
- e. Propose users experience for Toy researching to let everyone know about the main direction of this company.
- f. Develop many smart toy prototypes by using IOT or WOT principle.

## 10/2015 - 02/2016 Fuhu Taiwan Inc, Taipei Director Of Software Development

- 1. 30% for Management
  - a. Promote iOS team leader from 3 candidates within 2 months.
  - b. Build forum meeting and make sure at least one forum a week.
  - c. Hold management committee per month to share the management experience. Also come out the KPI for each team via the committee.
  - d. Hold a information security committee per week to discuss the security issues of the office and make a plan to face issues within one months.
- 2. 40% for Development
  - a. Integrate video DRM Solution into single DRM Solution to save about 300,000 per year.
  - b. Auto testing tool development to reduce content testing efforts from 1 week to 2 days.



- c. Build reporting system by applying BI tool to save development days from 1 month to few days.
- d. Apply consistence design for SDK to allow our library can be deployed to multiple platforms to reduce the learning curve from three days to just one day.
- e. Modify the ID system to support third party to integrate to their system by using Oauth 2.0.

#### 3. 30% for Research

- a. Propose auto wifi connect algorithm to allow users to connect to free wifi to send the short message.
- b. Develop Smart Story IOT device to not only sync the content and playing status from the mobile phone but also play interaction story to kids.
- c. Design Smart Augmented Reality (AR) remote cart to allow kids design their racing path and setup their weapon by using AR card.
- d. Develop Bring Your Owned Experience (BYOE) algorithm to improve users' in store experience. In other words, system can auto detect users' coming and then pass useful info to sales to improve their buying experience.
- e. Remove the redundant AWS instances to save at least 20% cost.

## 06/2014 – 10/2015 Fuhu Taiwan Inc, Taipei Senior Manager of Software Development

- 1. 40% for Management
  - a. Build up Android and server development teams to handle the project developing within 1 month.
  - b. Decide the scale of Android and Server team and reach the goal within six months.
  - c. Build IT, UX, SA, and iOS teams to handle the main development within six months.
  - d. Build Innovation team to handle not only technologies studying (60%) but also project development (40%) within 3 months.
  - e. Have at least 6 management courses per year to accumulate staffs' management concept.
  - f. Develop KPI system to evaluate not only staffs but also candidate managers.
  - g. Promote 2 managers from 10 candidates and assign to take over Android and Server teams.
  - h. Take cover all working effort from SJ server team and make a plan to let 80 staffs working efforts can be handled by just 10 staffs.
- 2. 40% for Projects development
  - a. Build project execution flow to improve at least 20% of JIRA issues tracing per project.
  - b. Apply middleware to let each issue can be figured out within one day.
  - c. Keep the reusable components and improve 30% of the integration days.
  - d. Share the reusable architectures to other teams to improve 20% of the integration days. e. Apply SMART evaluation methodology to reduce issues happen rate to 20%.
- 3. 20% for Research
  - a. Design the Middleware to reduce the coupling between client and backend to reduce 50% of integration effort.
  - b. Design In Store Experience algorithm to improve the shopping experience (i.e. coming/leaving algorithms).
  - c. Design Cache Engine to reduce at least 80% of API calling loading to meet the goal which the loading speed should be same with Netflix.
  - d. Research the third party DRM principle and try to develop our owned DRM solution to save at least \$800,000 developing cost.
  - e. Apply Cassandra to develop the Content Portal to reduce the content management efforts from 30 staffs to just 2 staffs.



- 1. Propose the Aerobic Programming theory to help developers pay more attention on story than structure when developing program.
- 2. Propose the 5 E development flow to focus on managers', boss's, users', developers', and members' experience.
- 3. Propose the multiple framework software architecture to let smart watch can communicate with both Android and iOS.

# 06/2013 - 12/2013 Quanta Computer Inc., Taoyuan Technology Manager

- 1. Lead Bluetooth phone project and apply the architecture of smart watch to improve the developing performance.
- 2. Lead smart projector project and build multiple channel communication architecture to share information between Projector and mobile device.
- 3. Develop the DLNA function to share the media file between mobile device and specific devices.

## 06/2011 - 06/2013 Quanta Computer Inc., Taoyuan Assistant Manager

- 1. Lead the cloud store project and develop the agent to help deliver and display materials to client side automatically. It can reduce the effort of cooperation with third party.
- 2. Integrate the aforementioned Agent principle to I'm communication project to quickly generate the prototype to proof of concept.
- 3. Lead Smart watch project and build Android like SDK to let developers easily develop and publish their own smart watch applications.
- 4. Develop the Smart watch launcher generator SDK to let developers easily design their own launcher.
- 5. Develop the pedometer algorithm in smart watch and propose the smart adjustment to enhance the accuracy rate.

## 10/2009 - 06/2011 National Central University, Taoyuan Post Doctoral Research Fellow

- Do deep research of Human computer interaction (HCI) especially on analyzing the interaction between mobile devices and human.
- Promoted to the research manager to help Professor Sherry Cheng to manage her laboratory and make the direction of the laboratory. Some important things are list below.
  - 1. Develop wheel based navigation tool to let users easily interact with the web based system.
  - 2. Publish at least 1 journal paper and five conference papers.

#### **10/2008 - 06/2011** PCSchool

#### **Senior Instructor**

- Mainly taught about programming languages such as Java, C, VB, .Net framework.
- A Sun certified instructor in both programming design((SL-275) and system programming (SL-314) and have taught above 1000 hours.
- An instructor in Media Tech to share the design experience of developing the VBA applications in Excel.

## **Projects:**

Wearable Device Development

December 2011 to June 2013



- 1. Mainly develop the smart wearable device that can interact with mobile device.
- 2. Be a software leader to coordinate not only human resource but also control the development risk.
- 3. Lead about 20 software engineers to execute the project.
- 4. Construct the architecture that developers can easily install the application form mobile device to wearable device.
- 5. Migrate the experience to develop the wearable device in RTOS platform.

## **Pico Projector Development**

May 2013 to Present

- 1. Develop the Pico projector which can support Android system.
- 2. Be a software leader to lead about 6 software engineers to execute the project.
- 3. To include the charming application, I have leaded three members to complete DLNA function development in two months.

## I'm communication application development

June 2011 to June 2012

We have implemented both audio and video call in this project. In this projector, I mainly support the software architecture development. More specifically, I applied several design patterns (ex. Factory, Proxy, State Machine, ...) to reduce the development effort. Moreover, I have also proposed the Agent mode to divide the system to several simple and easy implemented components. The project is mainly developed the communication application based on Skype SDK.

## **Cloud based Application Development**

June 2012 to June 2013

We tend to develop the shop store concept in vertical market. More specifically, our solution can support to automatically download product materials from server and run in the shop store. Moreover, there are several interactive applications can interact with customers to increase their buying motivation. In this project, I have developed the architecture to support both client and server side to automatically communicate with each other.

#### **Bluetooth Phone Development**

July 2013 to September 2013

Based on the wearable device development, the developing experience has been migrated to the Bluetooth phone. More specifically, I have leaded the 3 members to execute the project in only one month. It can demonstrate that the good software architecture can support reusability.

#### **Face Detection Project**

February 2012 to December 2012

It is mainly developed a virtual glasses wearing system to help users to choose suitable glasses when shopping in the glasses store. During the project, I am a software leader who may need to control not only human resource but also meet the project schedule. Moreover, to improve the quality of the system, we have developed the face suit algorithm which can auto detect face angle and adjust the glasses to meet the wearing face.

## **Health Care Algorithm Development**

January 2014 to Present



The pedometer algorithm has been developed in this project. More specifically, I mainly develop the step detection and distance simulation algorithm. Moreover, I have also leaded 3 members to collect users running behavior and do experiment to demonstrate the system robust.

#### **Bluetooth Chat Room APP**

December 2013 to Present

I made this project when I was free since the application development is also my interesting. During the project, I must think more about the demands from users when using the chat room. Thus, I have developed the short term chat room via Bluetooth technology. Different from the traditional Chat room that users may need to login to the internet chat room and share the topic with someone you cannot see. The Bluetooth chat room apply the Bluetooth to let users can share their topic with the people who are close to you. In other words, users can share their real information to other users (maybe their friends). Moreover, to overcome the problem that Bluetooth is hard to use since users may need to discovery the device and then identify device to pair. The application provides an easy way to share the information without any operation. Users just need to turn on their Bluetooth device and then press the share button of the application. They can share their owned topic directly. Moreover, the leveling up concept was also applied to the application to provide users more experiences than traditional one. More specifically, users can collect the resonance from other users (similar to "Like") to level up. After leveling up, users can use more elements to share their information.

## **Android based Hearing Aid APP**

April 2013 to Present

I made this project when I was free since the application development is also my interesting. During the project, I might need to consider the needs form the people who need hearing aid device. Therefore, it is mainly developed for providing people a free hearing aid device. More specifically, users just need to wear their ear phone of the mobile device then they can use their mobile device as hearing aid device. Moreover, the Bluetooth headset is also supported in the application. In other words, users can use their Bluetooth headset as their hearing aid device when using this application.

Besides, the zero level interface was applied in the application to provide users an easy way to use it. More specifically, users do not need to press the icon to enter the application since the Widget only interface is applied to directly interact at their desktop.

## nabiPass Streaming System Development

July 2014 to January 2015

#### 1. Purpose

It is mainly developed for providing a media streaming platform to kids. More specifically, it provides "All You Can Eat" service to allow kids to process their suitable media content (game, app, ebook, video, and audio) via the specific subscription.

## 2. Outperform:

a. Apply client cache to improve the loading speed (i.e. same with Netflix)



- b. Reduce API calls from 50 times to 3 times to improve server performance.
- c. Apply Middleware to save the integration time between server and client from 2 months to one week.
- d. apply current using DRM for APP/GAME protection to save the integration cost about 200,000 with other third party.
- 3. Scale: Large Scale
- 4. Join Members: 50
- 5. System Scope:
  - a. Server: Order System, Billing system, Promotion System, Account system, Category System, Content System, DRM system for video/Audio, DRM system for eBook, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response to server.
  - c. AWS instance for deployment.
  - d. Cassandra for DB implementation

## WishList Development

October 2014 to November 2014

1. Purpose

It is mainly used to provide kids a way to make a wish. More specifically, kids can make a wish to the app and the app will pass it to their parents. After their parent check their kids' homework, they can choose to come true their kid's wish or not.

- 2. Outperform:
  - a. Apply middle to save the communication between client and server from 2 weeks to 3 days. b. Apply the client cache to help refresh time.
- 3. Scale: Medium Scale
- 4. Join Members: 15
- 5. System Scope:
  - a. Server: Walmart Order System, Billing system, Account system, Walmart Category System, Restful

API for client Connection

- b. Client: Android: Middleware architecture to request/response to server.
- c. AWS instance for deployment.

## Remote Ask Parent Module by using Intel CCF Technic Solution

December 2014 to January 2015

1. Purpose

It is mainly designed to face the situation about "When parents are not at home but their kids need their help". Thus, we apply Intel CCF to send the command to parent's cellphone to ask their permission for their kid's requirements.

- 2. Scale: Small Scale
- 3. Join Members: 5
- 4. System Scope:



- a. Server: Account system, User management, Intel CCF server.
- b. Client: Android: UX wireframe and Middleware architecture to request/response to server.

## **Content Ingestion Portal Development**

March 2015 to September 2015

## 1. Purpose

It is mainly developed for providing an efficiency way to ingest content to the management portal to

allow nabiPass users can process the contents. Compare the older version, it may need about 40 engineers to process the ingestion flow and may take about two weeks to complete the ingestion. Thus, we proposed to design a new ingestion to face the issues.

## 2. Outperform:

- a. Apply automatic ingestion schema to the content portal to reduce the ingestion effort. b. It only needs two engineers to spends 2-5 hours to complete the ingestion task.
- 3. Scale: Large Scale
- 4. Join Members: 30
- 5. System Scope:
  - a. Server: Order System, Promotion System, Category System, Content System, DRM system for video/ Audio, DRM system for eBook, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response
  - to server. c. AWS instance for deployment.
  - d. Cassandra for DB implementation

#### nabiPass for Android version (with DRM solution)

March 2015 to April 2015

#### 1. Purpose

It is mainly to design general android version of the nabiPass.

- 2. Outperform:
  - a. Apply reuse client cache and middleware component to reduce development effort from several months to just 2 weeks.
  - b. According to reusable compoent integration, we just need 2 engineers to compete the project.
- 3. Scale: Medium Scale
- 4. Join Members: 2
- 5. System Scope:
  - a. Server: Order System, Billing system, Promotion System, Account system, Category System, Content System, DRM system for video/Audio, DRM system for eBook, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response to server.
  - c. AWS instance for deployment.
  - d. Cassandra for DB implementation



#### nabiPass for iOS with DRM solution

March 2015 to May 2015

1. Purpose

It is mainly to design general iOS version of the nabiPass.

- 2. Outperform:
  - a. Trace the source code of the DRM to develop the iOS version to save more than \$800,000 cost.
  - b. Self-develop iOS base app/game DRM protection.
- 3. Scale: Medium Scale
- 4. Join Members: 7
- 5. System Scope:
  - a. Server: Order System, Billing system, Promotion System, Account system, Category System, Content

System, DRM system for video/Audio, DRM system for eBook, Restful API for client Connect

- b. Client: Android: wireframe design, Middleware architecture to request/response to server.
- c. AWS instance for deployment.
- d. Cassandra for DB implementation

#### nabiPass Enhancement

March 2015 to May 2015

1. Purpose

It is a UX related project. More specifically, we try to do lots of researching for users to see if there is any improvement we can do for the users and then come out the solution. Different with other research that just come out the report, we tended to develop the prototype to show top manager how to improve nabipass.

- 2. Outperform:
  - a. Provide a prototype to top manager to show them our idea.
- 3. Scale: small Scale
- 4. Join Members: 5
- 5. System Scope:
  - a. Server: Category System, Content System, Restful API for client Connection
  - b. Client: Android: Wireframe and Middleware architecture to request/response to server. c. Usability testing, questionnaire design, and user testing plan.
  - 8, 1
  - d. AWS instance for deployment.
  - e. Cassandra for DB implementation

#### **Auto Checking Uploading Content Tool**

May 2015 to June 2015

1. Purpose



It is a testing tool for verifying content complementation. The python is applied t develop the tool. It is developed for saving PM's efforts. More specifically, it can reduce PM's verification efforts from 2 weeks to just 2 days.

2. Scale: small Scale3. Join Members: 1

## In Store Experience Algorithm Development

August 2015 to October 2015

## 1. Purpose

Package your using behaviors to anywhere and let every service provider know your needs. It is an innovation application. We planned to setup a beacon environment and provide several service provide IFTTT. For instance, you can choose "if entering the hotel, notify them to call me follow my schedule." or "if go to restaurant, tell them what kind of foods I do not like".

- 2. Outperform:
  - a. Design coming/leaving algorithm to detect users' in store situation. c. Apply IFTTT to let users easily design their owned experience.
- 3. Scale: Medium Scale
- 4. Join Members: 10
- 5. System Scope:
  - a. Server: Account system, Category System, IFTT service, Content System, Restful API for client Connection, User management
  - b. Client: Android: Middleware architecture to request/response

to server. c. UX: Wireframe

- d. AWS instance for deployment.
- e. Cassandra for DB implementation

#### **IDMS system Development**

October 2015 to January 2016

1. Purpose

Revise the ID system to provide a consistence way to not only developers but also third party to process our system.

- 2. Outperform:
  - a. Apply Middleware to save the integration time between server and client for just 1 day.
- 3. Scale: Medium Scale
- 4. Join Members: 5
- 5. System Scope:
  - a. Server: Billing system, Account system, User management, Restful API for client Connection b. Client: Android: Middleware architecture to request/response to server to test the IDMS.
  - c. AWS instance for deployment.



## d. Mongodb is used for DB implementation

## Where AM I? (Smart Find Me device)

September 2015 to February 2016

## 1. Purpose

It's the beacon application which can easily detect the timing of in/out house to let you know that users are coming or leaving. By doing so, you can give them diverse information to meet their needs.

- 2. Outperform:
  - a. Design in/out house algorithm.
- 3. Scale: small Scale
- 4. Join Members: 3
- 5. System Scope:
  - a. Server: Account system, User management, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response to server to test the IDMS. c. UX: Wireframe
  - d. AWS instance for deployment.
  - e. Mongodb is used for DB implementation

## **Story Time! Smart Story Projector**

December 2015 to March 2016

#### 1. Purpose

It is an ideal to connect your eliminate phone or tablet and the story machine. More specifically, u can insert your phone or tablet to our mechanism then the story module will start to tell the relevant story to your kids via pick projector. The major benefit is to not only cost down but also yes users' eliminate mobile devices.

- 2. Scale: Medium Scale
- 3. Join Members: 5
- 4. System Scope:
  - a. Server: Account system, User management, Content system, Restful API for client Connection b. Client: Android: Middleware architecture to request/response to server to test the IDMS.
  - c. UX: Wireframe
  - d. AWS instance for deployment.
  - e. MySQL is used for DB implementation

## **Auto Testing Tool For QA**

October 2015 to February 2016

#### 1. Purpose

It is a testing tool for QA. We hope it can reduce QA engineers' effort via using our testing tool. After our investigation, it can reduce QA engineers' effort from one week to 2 days for a medium scaled project.



2. Scale: Medium Scale

3. Join Members: 3

## Hey! Watch out! Hybrid Anti-theft System

November 2015 to February 2016

#### 1. Purpose

It is a brainstorming application. More specifically, we proposal a wifi connection methodology to connect to network in the public places. By doing so, we can implement the anti-theft system with very friendly price. Compare with beacon solution, we can provide longer distance detection and alert u when your goods are moved without your permission.

## 2. Outperform

- a. Design the auto connect function to connect to free wifi automatically. b.Design alarm algorithm to auto warm users.
- 3. Scale: Large Scale
- 4. Join Members: 8
- 5. System Scope:
  - a. Server: Account system, User management, Content system, Connection site service, Tracking system, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response to server to test the IDMS and wifi connect module.
  - c. UX: Wireframe
  - d. AWS instance for deployment.
  - e. MySQL is used for DB implementation

#### **Smart IOT Device For BabyCare**

March 2016 to Present

#### 1. Purpose

It is developed for baby care application. Similar with Echo, we apply Microsoft Cortana and IBM Watson to implement the speech to text (STT), intent evaluation, and text to speech (TTS). Moreover, it can detect baby's emotion to warm parents to take related actions.

#### 2. Outperform:

- a. Apply cloud base voice dialog engine to reduce the scenario development efforts from one week to one day.
- b. Apply middleware design to server client communication to reduce integration effort from several week s to few days.
- 3. Scale: large Scale
- 4. Join Members: 20
- 5. System Scope:
  - a. Server: OAuth 2.0, Billing system, Order system, Third party SDK, Account system, User management, Parental Control, Tracking system, Microsoft IOT event hub, Restful API for client Connection



- b. Client: Middleware architecture to request/response to server to test the IDMS. c. UX: Wireframe and art works.
- d. AWS instance for deployment.
- e. Cassandra is used for DB implementation

#### **ID System With Oauth 2.0**

May 2016 to Present

#### 1. Purpose

It will contain the integration of Google Firebase, OAuth 2.0, and COPPA flow. Moreover, it will provide diverse third parties to integrate to their ID systems. By integration with Google Firebase, the system will enable end-users to sign on with various social platforms, such as Facebook and Google accounts. The OAuth 2.0 supports the authentication and authorization on third-parties who request the resources of our ID and social platforms user accounts. Moreover, the permission management is provided to allow third parties to check their current permission status. For instance, developers can check whether the user pass the term of server or not via the permission checker.

2. Outperform:

Apply consistence design principle for SDK implementation to let developers easy to apply SDK to their current design system.

3. Scale: large Scale

4. Join Members: 20

5. System Scope:

a. Server: OAuth 2.0, Firebase verification, Billing system, Account system, User management, Parental

Control, Restful API for client Connection

- b. Client: SDK for Android, iOS, Web
- c. UX: Middleware architecture to request/response to server to test

the IDMS. d. AWS instance for deployment.

e. Mongodb is used for DB implementation

## **Testing App for users with cross platforms**

September 2016 to Present

## 1. Purpose

It is a UX related project. More specifically, we tended to do lots of testing for users to see their feedbacks from the IOT baby care device. It may focus on friendly interface for recording users' feedbacks.

- 3. Scale: small Scale
- 4. Join Members: 5
- 5. System Scope:
  - a. Server: Recording feedbacks system, Restful API for client Connection



- b. Client: Android and iOS, Middleware architecture to request/response to server. c. Wireframe design, Usability testing, questionnaire design, and user testing plan. d. AWS instance for deployment.
- e. Cassandra for DB implementation

#### **Content Store for Printed Files**

August 2016 to Present

#### 1. Purpose

It is mainly developed based on naiPass module for content category. Moreover, we may need to integrate the DRM solution to protect the printed files. Besides, we also need to implement in APP purchased module for both Android and iOS version.

- 2. Outperform:
  - a. Design DRM protection for printed files to save more than \$100,000.
  - b. Apply nabiPass server reusable module to complete the project with one month.
- 3. Scale: Medium Scale
- 4. Join Members: 5
- 5. System Scope:
  - a. Server: Order System, in app purchased system, Account system, Category System, Content System, DRM system for printed files, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response
  - to server. c. AWS instance for deployment.
  - d. Cassandra for DB implementation

## **Cloud Basd Voice Dialog for BabyCare IOT Device**

September 2015 to Present

1. Purpose

It mainly developed for automatically connecting TTS and STT to implement voice assistance. Different with IBM Watson, we apply IFTTT concept to provide an easy way to users or developers to implement their triggers and actions of voice communication.

- 2. Outperform
- a. Design IFTTT connection to automatically take related actions according to users' response.
- b. Script base voice dialog algorithm, which apply deep neural network, can let developers easily implement users' scenarios.
- 3. Scale: Medium Scale
- 4. Join Members: 8
- 5. System Scope:
  - a. Server: Account system, User management, Script Uploading System, IFTTT service, Tracking system, Restful API for client Connection
  - b. Client: Android: Middleware architecture to request/response to server to test the IDMS.
  - c. UX: Wireframe
  - c. AWS instance for deployment.



d. Cassandra is used for DB implementation

## **Smart Toy Mainstream Research**

March 2016 to May 2016

1. Purpose

It is a UX related project. More specifically, we tended to do lots of research and survey to let everyone know about the mainstream of the smart toy.

- 2. Outperform:
  - a. Have a brainstorming meeting to collect ideas form participants and generated the completed solution.
- 3. Scale: small Scale
- 4. Join Members: 3
- 5. System Scope:
  - a. Report for survey result.
  - b. Suggest the development direction and share some ideas.

## **WOT for Smart Toy development**

September 2016 to Present

Purpose

We tended to develop the Web of things to connect Toy to cellphone via the restful APIS. Currently, we tend to apply the Restful APIs to our device and build the connection between

# **Certifications:**

**Sun Certified Programmer** 

Sun Microsystems December 2009

the Device and mobile device.

**Sun Certified Web Component Developer** 

Sun Microsystems March 2010

**Sun Certified Mobile Application Developer** 

Sun Microsystems January 2010

**Sun Certified Instructor (Programming Design(SL-275))** 

Sun Microsystems 2010

**Sun Certified Instructor (System Programming (SL-314) )** 

Sun Microsystems 2010

**Microsoft Certificate of Excellent (MCTS/Windows 7 Configurations)** 

**Microsoft** 

Certified Developer On Apache Cassandra

DataStax License V2.1-0090 July 2015

**Certified Scrum Master** 

Global Association for Quality Management (GAQM) License 88876 November 2016