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"Stay hungry! Stay foolish! Work with smart guys!"

## Education

## The University of Auckland

Auckland, New Zealand

MASTER OF ENGINEERING IN SOFTWARE ENGINEERING - GPA: 7.75/9.00

Aug. 2015 - Jun. 2016

The Beijing University of Aeronautics and Astronautics

Beijing, China

BACHELOR OF ENGINEERING IN SOFTWARE ENGINEERING - GPA: 3.71/4.00

Aug. 2009 - Jul. 2013

## Skills

**Programming** C#, C/C++, JAVA

**Scripts** PHP, JavaScript, HTML5, CSS, Perl, Shell, Batch

**Platforms** Windows, Linux

# Experience \_\_\_

#### The University of Auckland

Auckland, New Zealand

Nov. 2015 - Mar. 2016

RESEARCH ASSISTANT ON MPAID (MAORI PRONUNCIATION AID) PROJECT

- Research & Design: Took over the project and studied the associated backgroud knowledge. Cleaned the legacy code and re-designed the architecture as well as the UI.
- Speech Recognition: Built the Maori language model by an open-source toolkit named HTK. Automated the languae model building process by Perl and batch. Improved the recognition rate from 44.6% to 80.4%.
- Evaluation & Feedback: Implemented a score board to record users' pronoucing performance, analyse the recognition results and provide valuable feedbacks.
- Media: Integrated the NAudio library to play and generate audio recoordings. Embedded the VLC player to play the videos of pronuncing demostrations.
- **Document**: Uploaded and managed the source code on Github. Wrote the project wiki and kept releasing new versions.
- Future Plan: Wrote a detailed proposal about migrating the MPAid from desktop to mobile and server-hosting.

#### The Second Academy of China Aerospace

Beijing, China

LEADER OF ITOS (INTELLIGENT TRANSMITTING ONLINE SYSTEM) TEAM

Apr. 2013 - Feb. 2015

- Design: Designed the iTos, which can dynamically change the quality of transmitted media according to the bandwidth.
- Implementation: Re-wrote the notwork component by IOCP to improve the parallel transportation. Built the media decoding/encoding/transmitting core by ffmpeg and RTSP protocol. Implemented the system sanpshot function to recover node server from fatal errors.
- **Promotion**: Promoted and deployed the iTos to 3 military bases.
- Team Building: Built an outstanding team who won the prize "the excellent team of 2014".

## **Patents**

## Children Cognitive System Based on Augmented Reality Technology and **Cognitive Method**

China

PATENT ISSUED —- CN103035135A

Nov. 2012

- · Comprised an image information input module, an image information matching module, a drawing model module and a voice recognition module.
- Developed through interfaces of an ARToolkit augmented reality development kit, a Microsoft Speech SDK voice recognition engine, a 3D max modeling tool and the like.
- Performed simple interaction with a virtual scene in a computer through the voice recognition.
- Operations like moving, amplifying and contracting a model are achieved through OpenGL image processing technology and 3D modeling technology.



### The MPAid (Maori Pronunciation Aid)

Auckland, New ZeaLand

THE UNIVERSITY OF AUCKLAND

Mar. 2016

• A software on . Net platform with Maori speech recognition and evaluation system to help Maori speaker improve their pronouciation.

The Getskills Website

Auckland, New ZeaLand

THE UNIVERSITY OF AUCKLAND

Oct. 2015

 An online education employment website developed with C# and running on microsoft Azure server for a New Zealand company named Getskills.

## The iTos (Intelligent Transmitting Online System)

Beijing, China

THE SECOND ACADEMY OF CHINA AEROSPACE

Feb. 2015

· A system with a high performance in massive media distributing and delivery.

#### **Children Cognitive System**

Beijing, China

THE BEIJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS

Nov. 2012

 An education paltform which applied AR (Augmented Reality) and VR (Voice Recognization) technologies to improve the interaction between computers and children, aming to help pre-educational children effectively learn some abstract objects like thunder, wind and fog.

# **Extracurricular Activity**

## MSTC (Microsoft Technology Club), Buaa

Beijing, China

CORE MEMBER

Nov. 2009 - Jun. 2013

- Attended the coding competition —- "The big tank war".
- Won the prize —- "The future star".

#### The special college for the senior, Buaa

Beijing, China

Tutor

Jun. 2011 - Aug. 2011

· Worked in summer holidays as a volunteer tutor who taught those retired lecturers basic computer backgroud knowledge and skills.