

# ZHIJIE LAN

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## PROFESSIONAL EXPERIENCES

**Wisesoft Co., Ltd.**, Chengdu, Sichuan, China 09/2015~06/2019

Full-Time, **Software Engineer** at Civil Aviation Department

- Awarded The Best Employee of the Year 2016 (10 out of 500 employees), 01/2017.
- Independently developed and maintained the *Aircraft Situation Data Displays* system, the core software of the Air Traffic Control Automation System.
- Engaged in software development, design, debugging, and testing of C++/Java/Qt code.
- Installed and configured the operating system (Windows/Linux), database, and LAN system (10+ servers and 50+ clients) for the software.
- Handled more than hundreds of client needs, new features, and program bugs of the software.

## ACADEMIC AND PERSONAL PROJECTS

**Marine Mammal Sound Classification**, Python / Machine Learning 09/2020~Present

Supervisor: Dr. Yuanzhu Chen, Department Head of Computer Science

Dr. Octavia A. Dobre, Associate Dean of Engineering and Applied Science

- Fetched marine mammal audio data.
- Built metadata for all audio files for machine learning and deep learning.
- Used Python, Pandas, Librosa, and Scikit-Learn in Jupyter Notebook to build machine learning models to classify sound.
- Exploring and learning different algorithms of machine learning and deep learning.
- Trying to finish this project by using deep learning methods based on Keras and Tensorflow.

**PreZoom (Presentation Software with Animation)**, Java / Swing / GUI 09/2020~12/2020

Honors: The Team Leader, The Best Software Award (1 out of 12 groups)

- Developed a presentation application based on Java Swing GUI that combines features of PowerPoint, Prezi, and Keynote.
- Designed the whole structure of the software, and finished most of the documentation.
- Divided programming tasks and assigned jobs to teammates.
- Wrote automated tests for the program.
- Managed the git repository of the project.

**Vehicle License Plate Recognition**, C++ / OpenCV / Machine Vision 05/2020~08/2020

- Developed an image processing program that can extract characters of vehicle license plates from images.
- Used OpenCV to preprocessing original images to locate and extract plate images.
- Used a pre-trained KNN model to recognize characters from plate images.

**Unity Game Development**, C# / Unity 2020

All game Demos can be played online (see my portfolio link above).

- Developed a 2D platform game using Unity.
- Developed a third-person adventure game using Unity.
- Developed a first-person shooting game using Unity.

## EDUCATION

**Memorial University of Newfoundland**, St. John's, Canada 09/2019~Present

Faculty of Engineering and Applied Science, Master of Applied Science in Computer Engineering

Current GPA: 3.87/4.0

**Chengdu University of Information Technology**, Chengdu, China 09/2011~07/2015

College of Communication Engineering, Bachelor of Engineering in Communication Engineering

GPA: 3.1/4.0

Scholarships and Honors: Outstanding Leader of Student Union, 01/2015

Second Grade Scholarship, 10/2013

Third Grade Scholarship, 11/2012

## OTHER INFORMATION

**Technical Skills:** C/C++, Java, Python, Data Analysis, Machine Learning, Unity, C#, Linux, Database, etc.

**Languages:** Chinese-Native, English-Fluent.

**Interest:** Basketball, snowboarding, video games, board games, music, etc.

**Personality:** Outgoing, friendly, resourceful.