# Hongbo Zhao(Joe)

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### **Highlighted Qualifications**

- Strong at C#, Visual Studio with more than 10 years' experience. Good at VB, C++.
- Strong at **Windows platform** technology such as socket communication, serial communication, hardware interface, regular **algorithm**, **design pattern**, etc.
- Good at **SQL**, **SQLite**, **MySQL**, more than 3 years' experience.
- Familiar with **Azure**, **ASP.net**.
- Good at **WPF**, Familiar with **MVVM architecture**.
- Familiar Scrum, Github.
- 3 months **Unity** experience.
- 5 years' experience at a project management.
- Good experience at **software design document** writing.
- Proficient at **Agile** development.

## **Work Samples**

Github link: https://github.com/potatozhb?tab=repositories

### DesignpatternAgSample

Include some basic design pattern codes: Singleton, Factory,

Bridge, Observer, Command, State, Strategy...

Some algorithm codes: Async upload data, binary search tree build, remove node, balance, strong connection search, tries.

Machine learning: use ML.net to build a model to analyze the customer comments is positive or negative.

Azure SQL database: Visit Azure sql database.

## **MVVMworksample**

MVVMworksample: Use WPF to do a MVVM sample.

CaliburnMicro: Use Caliburn Micro lib to do a MVVM sample.

MapControl: Compare WPF map and universal map.

### **Work Experience**

## **Software Engineer**

2018 to 2021

Aurora Aerial Inc.

I did the GCS(ground control station) software from requirement research, writing the requirement research report and design document, starting the code job from an open source code of Ugcs, finish the initial version by c# and WPF, and then guide our software team continue the development work.

I was also in charge of researching, integrating, and testing the whole drone systems. Doing some project management by Wrike.

- Software architecture is server/client. Server is communicate with autopilot and get the missions from client.
- Develop by c#, use dotnet 4.72 framework.

- The UI is designed by WPF.
- The GCS is a software which manage the drone to finish the complex mission.
- Create the mission and fly route, show the information of the drone and route on map.
- Serials port communication with the hardware.
- Communicate with other plugins by TCP/IP.

### **Software Engineer**

2010 to 2017

Beijing Purkinje General Instrument Co., Ltd (北京普析通用仪器有限责任公司)

The biggest analytical instrument company in China in the field of optics, chromatogram, mass spectrum instrument for chemical lab and medicine factory. I was in charge of the design, develop and manage the following project. The project was developed by c# and WPF on windows platform.

- Instrument Control Software that was a military project helping the soldier monitor and identify harmful gases in the war.
- c# for coding. UI is designed by WPF.
- Run a fully third party software test process.
- Write all of the technical document including requirement, design, detail design, test plan, test result and summary document and pass the third party corp's assessment.
- Training the customers how to use the system.

## **Software Engineer**

2007 to 2010

Beijing KangTuo Infrared Company (北京康拓红外红外技术股份有限公司)

- Developed a product for the railway system to test the crack of railway line
- Designed the software, wrote and tested the code of C# and WPF, trained customers

### **Software Engineer**

2003 to 2007

Beijing East Simulation Company (北京东方仿真控制技术有限公司)

- Developed a software to help the chemical factory and universities to train their new workers and students.
- Used VB and c# to develop functions and components.

#### **Education Background**

Bachelor of Science (Process equipment and control engineering)
 DA LIAN University of Technology

1999-2003

• Software development (C#) training

2004-2005

### Reference

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