

# HONGTAO ZHANG

✉ hzhang784@wisc.edu · ☎ (608)960-6817 · in hongtao · Github: taooceros

## 🎓 EDUCATION

### University of Wisconsin Madison

Madison, WI, 12/2024

B.S. in Computer Science, Mathematics, Statistics, Data Science · *L&S Honors*

GPA: 4.0/4.0.

## 👤 EXPERIENCE

### Flow Launcher | Github Open Source Project 1.8k ★

10/2020 – Present

C# (.Net Core) Member

A plugin-driven launcher for Windows that help users to quickly launch apps, explore file/folder, and customizable functionalities with plugins.

- Optimized display mechanism to prevent freezing when processing large scale of results (10000+)
- Redesigned communication protocol with plugins written in other language with JSONRPC Protocol.
- Rewrote plugin parallel co-routine model and Revised Asynchronous Event Loop system
- Designed and Implemented Extendable Highlight Mapping API transferring Pinyin query match to highlight displayed in Chinese with Range Binary Search to allow Pinyin user to understand the query match
- Expanded 20+ external API to provide more flexibility to plugin authors.
- Constructed and Managed the Translation CI/CD with *Crowdin*
- Refactored UI Component with *WPF MVVM*
- Organized the community
- ★ increased from 180 to 1.8k

### Flow Launcher Docs

05/2021 – Present

Document Websites for Flow Launcher

- Wrote document and tutorial for .Net plugin development
- Generated API Reference Page
- Reorganized sidebar structure and styles

### Flow Launcher PluginsManifest

01/2021 – Present

Plugin Management Repository for Flow Launcher

- Designed the CI/CD with *Github Action* to auto fetch plugin update information
- Managed the new plugin submission process

### Flow.Plugin.WindowWalker

01/2021 – Present

C# (.Net Core), Maintainer

A Plugin of Flow Launcher to switch between opened windows.

- Constructed CI/CD with *Github Action* (widely used in other plugins)
- Improved Performance by 30%
- Implemented Quick Window Search so that user may search a specific window by a customizable query

### VMawalk

06/2020 – 01/2021

HTML/CSS/JavaScript/C# Individual Project, collaborated with in Jeffrey Yu and in Peng Qiu

A peer-review platform for teachers and Courses for Vanke Meisha Academy.

- Implemented the BackEnd Restful API *ASP.Net Core* and User Management System (JWT)
- Constructed and Managed the Database *MS-SQL*
- Implemented FrontEnd Pinyin and Acronym Fuzzy Search
- Optimized FrontEnd Performance and Front-Back Communication *JQuery*

## ⚙️ SKILLS

- **Programming Languages:** C, C++, Python, Java, Go, JavaScript, TypeScript, R, Matlab, HTML, CSS,  $\text{\LaTeX}$
- **Framework & Tools:** ASP.NET Core, Blazor, WPF, Sql-Server, Vue.js, React.js, Chakra UI, Qt, Node, Express.js, Django, Flask, Graphene, SQLAlchemy, Web Crawler, Pandas, Jupyter, Axios, JQuery, Nginx, Unicorn