

Hung-Chun Tsai

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SUMMARY

I am an iOS and Unity Developer with a strong passion for developing software on multiple platforms with strong, scalable code. Working experience on C#, Swift, JavaScript, and C++. Strong technical proficiency with work in AR/VR and mobile development field.

EDUCATION AND TRAINING

Mobile Solution Development, Conestoga College, Waterloo (2020-2021)

Master of Science

Computer and Communication Engineering, Ming Chuan University (2018-2019)

- Research Assistant of "Tango 360: Mobile VR Fusion with RGB-D and 360 Camera" project. (2018)
- Teacher Assistants for Virtual Reality curricular for one semester (2018)
- Research Assistant of "VR Pottery and Marbling Art Painting Simulation System" project. (2018-2019)

SKILLS & QUALIFICATIONS

Programming Languages: Swift (1 year), C# (4 years), HTML & JavaScript (1 year)

Methodologies: Object Oriented Programming, Agile

Physics & Math principles: Spray simulation, Mesh generation, Camera calibration.

Development Tools: Xcode, Unity3D, Visual Studio, Visual Studio Code

UI/UX Development: Figma

VOLUNTEER EXPERIENCE

Student Ambassador, Ming Chuan University, August 2014-July 2015

- Directed daily tours of the campus for prospective students and families
- Liaised between the university and prospective students and parents during tours and student visit days
- Led groups of youth in discovery exercises and offered personalized support to individuals in need of extra assistance

PROJECTS & HONORS

2016 **"VR Spray" & "3Draw" – Lead C# Programmer and Technical Director (Team of 4)**

Graffiti simulator and 3D Model drawing system in VR and AR environment (Unity)

- SIGGRAPH Asia 2016 Exhibition
- Combine with 3D printer
- VR Spray – [Demo Link](#), 3Draw – [Demo Link](#)

2017 **"VR Pottery" – Technical and Program Director Assistant (Team of 4)**

Pottery art simulator in VR with hand gesture capture (Unity)

- Using mesh manipulation to simulate the pottery art
- Combine the hand gesture capture by Leap Motion
- VR Pottery – [Demo Link](#)

2018 **"Red Signal" – C# Programmer and VR Technical Director (Team of 7)**

Traffic accident experience interactive device in VR (Unity)

- Simulation of car accident with VR headset
- Silver Award for 2018 VISION GET WILD AWARD
- Red Dot Award: Communication Design "Winner"
- "Red Signal" – [Behance Link](#)

2021

"Weather Forecast " – Personal Project

Single view application with search country & city weather forecast (iOS, SwiftUI 2)

- MVVM design pattern
- Implement Dark Sky API
- Implemented Combine framework
- Implemented CoreLocation
- MVVM design pattern

"Atomic Habit" – Lead Programmer (Team of 3)

Habit trackers combine with social media (iOS, SwiftUI 2)

- Implemented Firebase services for Authentication & Third-party login
- Onboarding Screen
- Implemented Combine framework
- MVVM design pattern
- Implemented NoSQL Realtime Database using Firestore
- Designed the application's UI and UX
- Application presentation – [Demo Link](#)

"Quoter" – Personal Project

More than 10 thousand quotation which motivate user every day. (iOS, SwiftUI 2)

- MVVM design pattern
- Export scene/view to the pictures
- Implemented CoreData
- Json decode
- AppStore Link - [Quoter](#)