



Jesse Hsiu

修敏傑 (Min-Chieh Hsiu)
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More Detail: jessehsiu.github.com

PROFILE

My name is Jesse Hsiu (Min-Chieh Hsiu, 修敏傑). A programmer currently studies at department of CSIE in National Taiwan University. Research domain includes Human-Computer Interactions and Ubiquitous Computing. Love to explore and use new technologies to make life easier with coding. My expertise includes Wearable, Mobile Application, and Web Development.

EDUCATION

National Taiwan University — M.S. (Sep'14–Present)

- Dept. Computer Science and Information Engineering

National Taipei University — B.A. (Sep'10–Jun'14)

- Dept. Computer Science and Information Engineering
- Graduated 1st in department

Taipei Municipal Daan Vocational High School (Sep'07–Jun'10)

- Dept. Computer Technique
- Graduated 2nd in department

EXPERIENCES

Teaching Assistant, Programming 101 玩電玩，學程式 @ NCCU Sep'15 Jan'16

- Assisted Prof. Neng-Hao Yu during the class at NCCU.
- Taught Processing programming, Arduino, Android, and Processing.js.

Chief Coordinator, Hour Of Code - Affiliated High School of NCCU Dec'15

- Taught Arduino programming to high school students.

Exhibitors, 2015 DOIT Taiwan Open Innovations Festival Nov'15

- Invited and presented project Nail+ during the exhibition.

iOS Application Developer (Internship), Tickle Inc. May'15 Jul'15

- Development of Tickle iOS application.
- Integrated external APIs into App including Sphero, Ollie, and Dash&Dot.

Chief Coordinator, UIST 2014 Traversal @ NTU Workshop Mar'15

- Held annual UIST Traversal workshop event at NTU.

Exhibitors, 2014 DOIT Taiwan Open Innovations Festival Nov'14

- Invited and presented project EyeWrist during the exhibition.

AWARDS

- **Excellent Work, SensingNail**

MediaTek Wearable device into IoT competition, 2015

- **Global Top 3 & Honorable Mention, Fighting Gulliver**

ACM CHI Innovative Game Design, 2015

- **2nd Prize, EyeWatch**

MobileHero – User Experience Design Competition, 2014

- **Final Shortlist, EyeWrist**

MediaTek Wearable device into IoT competition, 2014

- **Final Shortlist, The Incredible Shrinking Adventure**

ACM UIST 2014 Student Innovation Contest

SKILLS

- **Languages:**

Objective-C, Swift, Python, JavaScript, Java, C#, C++, C, PHP, MySQL

- **Tools:**

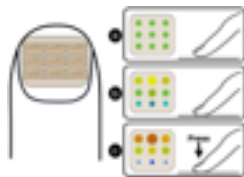
Xcode, Node.js, Express.js, Meteor.js, Phonegap, Unity3D, Arduino, Processing, MongoDB, OpenCV, CadSoft Eagle

- **Hardware Platform:**

iOS, Apple Watch, Android, Android Wear, Leap Motion, Oculus Rift, Kinect, Google Glass

PROJECTS AND PUBLICATIONS

During my M.S. and B.A. degree, I participated in various projects from software developing to hardware prototyping. Through series of projects, I have gained invaluable computer science knowledge and practical experience which covered a variety of platforms including nail-mounted device, smart wristband/watches, smartphones, head-mounted display applications development.



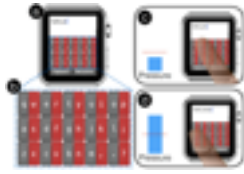
Nail+: Sensing Fingernail Deformation to Detect Finger Force Touch Interactions on Rigid Surfaces

MobileHCI '16 (Accepted)

Min-Chieh Hsiu, Chiuann Wang, Da-Yuan Huang, Jhe-Wei Lin, Yi-ping Hung, De-Nian Yang, Mike Chen

My Contribution:

- Putting forth the idea and being project leader
- Node.js application as the hardware control center and user interface
- Using machine learning for recognizing different gestures
- Designing and producing an Arduino Nano shield by Eagle PCB layout



ForceBoard: Using Force as Input Technique on Size-Limited Soft Keyboard

MobileHCI '16 Demo (Reviewing)

Min-Chieh Hsiu, Da-Yuan Huang, Chi An Chen, Yi-ping Hung, De-Nian Yang, Mike Chen

My Contribution:

- Putting forth the idea and being project leader
- iOS application for simulating and evaluation of small-size keyboard
- Implementing Node.js application for data visualization and analysing



Giggler: An Intuitive, Real-Time Integrated Wireless In-Ear Monitoring and Personal Mixing System using Mobile Devices

MM '15

Andries Valstar, **Min-Chieh Hsiu**, Te-Yen Wu, Mike Y. Chen

My Contribution:

- iOS / Mac application for broadcasting audio in real-time
- Using Bonjour service for devices discovering and connection
- Collecting initial feasibility of the system through user study



PalmGesture: Using Palms as Gesture Interfaces for Eyes-free Input

MobileHCI '15

Cheng-Yao Wang, **Min-Chieh Hsiu**, Po-Tsung Chiu, Chiao-Hui Chang, Liwei Chan, Bing-Yu Chen, Mike Y. Chen

My Contribution:

- Using Node.js application for data processing, analysing and sample scenarios including web, smartphone and google glass
- Computer Vision for tracking finger movement on palm



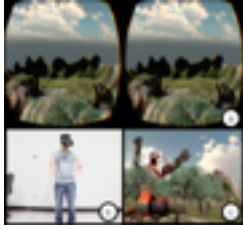
PalmType: Using Palms as Keyboards for Smart Glasses

MobileHCI '15

Cheng-Yao Wang, Wei-Chen Chu, Po-Tsung Chiu, **Min-Chieh Hsiu**, Yih-Harn Chiang, Mike Y. Chen

My Contribution:

- Implementing data processing (VICON) and real-time communication



Fighting Gulliver: An Experiment with Cross-Platform Players Fighting a Body-Controlled Giant

CHI'15 EA

Kuan-Ting Chou, **Min-Chieh Hsiu**, Chiuang Wang

My Contribution:

- Developing a real-time game through Photon engine network
- Using Unity3D to develop cross platform application included iOS / Android / Mac



Your Route My Trip - Story Memorizer

Chinese CHI '13

Jiungyao Huang, **Min-Chieh Hsiu**

My Contribution:

- Developing iOS application for sharing and saving travelling experience with routes information
- Implementing markless image recognition on iOS device for augmented reality application
- MySQL backend system for routes and users management