

HSING (PAUL) LIU

iOS/frontend/AI engineer well-versed in learning science and instructional design

liu.hsing@gmail.com

+886-0986124020

[LinkedIn](#)

[GitHub](#)

[Portfolio](#)

EXPERIENCE

Carnegie Mellon University, Eberly Center for Teaching Excellence, Pittsburgh, PA
Research Assistant Learning Engineer Jun. 2020 — Aug. 2020

Researched browser-based CO (a subset of the C language) interpreter for embedding custom programming exercises in online courses

National Dong Hwa University, Artificial Intelligence Laboratory, Hualien, Taiwan
Project Assistant Feb. 2018 — Mar. 2019

Constructed a web-based educational AI Go game platform using React, Django and fine-tuned the gameplay AI algorithm in C for children learning Go

PiPiMy Technology, Taipei, Taiwan
Senior iOS Developer Jan. 2015 — Feb. 2016

Developed the iOS app of PiPiMy, a mobile e-commerce platform, as the primary iOS developer and successfully deployed to the App Store

SKILLS

Programming

React & Redux, Vue,
iOS UIKit

JavaScript, Swift,
Objective-C, Python

Tools

Git, Visual Studio Code,
Xcode, ScreenFlow

EDUCATION

Carnegie Mellon University, School of Computer Science, Pittsburgh, PA
Master of Educational Technology and Applied Learning Sciences (METALS) Aug. 2020

Selected Coursework: Personalized Online Learning, The Role of Technology in Learning in the 21st Century, Human Learning and How to Optimize it

New York University, Courant Institute of Mathematical Sciences, New York, NY
Graduate Coursework in Mathematics May 2012

New York University, Courant Institute of Mathematical Sciences, New York, NY
Master of Science in Mathematics Dec. 2007

PROJECTS

Branching Scenario Formative Activity Authoring Tool Jan. 2020 — Aug. 2020
METALS Capstone Project in collaboration with Western Governors University
Primary roles: Project manager and developer

Linear Algebra Course Module Design Aug. 2019 — Dec. 2019
Designed an instructional module on matrices and linear transformations targeting deep understanding for non-math major college students

Physical Climatology Intelligent Tutor Aug. 2019 — Dec. 2019
Co-designed and Implemented a rule-based intelligent tutor for the Climate Change Science and Adaptation class at Carnegie Mellon University

Deep Reinforcement Learning Tetris AI Apr. 2019 — Jul. 2019
Developed a Monte Carlo tree search-based Tetris-playing AI algorithm trained via reinforcement learning in S4TF (Swift for TensorFlow)

Advanced iOS Auto Layout Online Course Mar. 2016 — Jan. 2018
Designed and Produced over 70 instructional videos covering advanced iOS development topics from a mathematical perspective