

Chao-Wei Tu

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EDUCATION

Bachelor of Science, Computer Science | Minor in Statistics

Expected May 2023

University of Maryland, College Park, MD

GPA: 3.8/4.0

COURSES

Object-Oriented Programming, Computer Systems, Algorithms, Intro to Data Science, Linear Algebra, Probability and Statistics, Intro to Machine Learning, Advanced Data Structure, Computer Vision, Intro to Compiler

PROFESSIONAL EXPERIENCE

EPI Material Technology Inc.

Jul.– Aug. 2018, Jul.– Aug. 2020

- Designed and developed a new website with additional responsive view feature and multiple language support, allowing the company to reach out to more potential business partners

GROUP RESEARCH / PROJECTS

Salmooc Learning Platform – member of Harvard Innovation Lab (<https://salmooc.com/>)

Jun. 2021 – Present

- Developed a problem-based learning platform that encourage reflections and discussions among peers
- Integrated user experiences data from marketing and designing teams, and brainstorm key features
- designed database schema that handles multiple courses with nested data structure
- Guided 3 members of backend team on setting up the backend environment on Amazon AWS

ML for COVID-19 Data with Python and Docker (<https://chiayolin.org/cmsc320-final/>)

Feb. – May 2021

- Utilized ML libraries such as numpy polyfit, sklearn, and scipy to fit a model over vaccination and death rate
- Performed hypothesis tests to prove the efficacy of vaccines in reducing death

PERSONAL PROJECTS

“DPunch” Decentralized Employee check-in Application

Jan. 2022 – present

- Developed a DApp that link employees’ digital wallet to the system as identification to prevent dishonest check-ins
- Deployed a smart contract for the application using Solidity and testing extensively on Ganache

“Taiwan Scene List” Web Application with ReactJS (github.com/cwtu/taiwan-scene-list.git)

Mar. – May 2021

- Created a Taiwan’s scene spots browser application that fetches data from public API as the user scrolls
- Worked with ReactJS hooks to prevent unnecessary components re-render for efficiency

“Forest Hunter” Java Text-Based Game (github.com/cwtu/forest-hunter.git)

Nov. 2018 – Jan. 2019

- Applied Object Oriented concepts such as polymorphism and abstractions to create objects, rooms, and maps that allows player to move around, grab objects, and pick a fight with the enemy

SKILLS

Programming Languages: HTML, CSS, JavaScript (ReactJS), PHP, SQL, C, Java, Python, Solidity, R, Matlab, OCaml, Racket

Other Skills: web development, statistical analysis, algorithms, DApp, 3D modeling, electronic circuit design

Tools: AWS, Docker, Git/Github, Jupyter, VScode, Arduino, Ganache, Fritzing, Tinkercad

Speaking Languages: **English** – professional working proficiency, **Mandarin** (Chinese) – Native