

EDUCATION

NEW YORK UNIVERSITY

Sep 2019 - May 2021
MPS, Interactive Telecommunications (ITP)
4.0 GPA, Tisch Scholarship, Red Burns Scholarship

CITY UNIVERSITY OF HONG KONG

Sep 2014 - May 2018
BSc, Creative Media
Valedictorian, Dean's List

PROJECTS

BinWatch 2020 - Ongoing

Designed and engineered hardware MVP of wristwatch that tells time in binary. Progressing from prototyping stage to production with a final goal of 130 batches

PCB Design, Atmega328p/Arduino, Low Power
jasontsemf.github.io/binwatch.html

BankHeist 2020 - Ongoing

Devised an IoT solution for signing physical documents remotely and securely over the internet in real-time. Working towards open-sourcing

IoT, Socket.io, Express.js, Crypto.js, Electron.js, Serialport.io
jasontsemf.github.io/bankheist.html

OptiMice 2019 - Ongoing

Devised a novel online tailoring experience which offers bespoke computer mice to pro computer users. Currently refining 3D scanning pipeline with ML algorithms

Photogrammetry, AI, 3D Printing, BLE, Eagle(cutsum library, programmatic board outline), MERN
jasontsemf.github.io/optimice.html

SKILLS

HARDWARE DEV

Rapid Prototyping (Arduino C/C++, Raspberry Pi)
Eagle PCB (Schematic, Board, Custom library design),
Serial Communication, NFC (antenna, energy harvesting), BLE (HID device), RTC, EE lab equipment

HARDWARE DESIGN

Fusion 360, 3D Printing, Laser Cutting, Machine Shop, CMF

SOFTWARE DEV

Salesforce, MERN Stack, Socket.io
JAVA, C#, Python, SQL, Git, Command Line

SOFTWARE DESIGN

UX Design (Figma), Adobe CC

EMERGING TECH

TensorFlow, VR/AR (Oculus, Unity3D)

AWARDS AND ACHIEVEMENTS



MIT ENTREPRENEURSHIP & MAKER SKILLS INTEGRATOR Champion, Engineer, Design Lead Jan - Feb 2018

- Recognised for best product and business idea in this 2-week hardware startup bootcamp where 5 teams of bright young entrepreneurs competed. Demoed prototype and presented GTM strategy to prominent VCs (e.g. Alibaba)
- Prototyped "Tagit", a smart countertop device that alleviates food spoilage, using Arduino and 3D printing, and developed proprietary Bluetooth Android app
- Led the design team to create hardware, interaction, UI/UX, and 3D design



PROJECT "RUN! VENDOR" Team Leader, Technical Lead Apr 2016 - Mar 2017

- Led development of interactive TempleRun clone game that is played on a treadmill
- National media recognition (e.g. ViuTV, MingPao Daily)



DISNEY IMAGINATION DESIGN COMPETITION Finalist, Team Leader Oct - Nov 2016

- Led one of the top 9 final teams out of 250 competitors and designed a "public open space" based on Disney design principles and IP, with Unity3D and physical models

WORK EXPERIENCE



NEW YORK UNIVERSITY, NY Graduate Assistant (OK Robot Reboot) Jan - May 2021

- An undergraduate course centers around the interaction between human and **AI, voice interfaces, machine vision, and robotics**. It introduces technologies including **Raspberry Pi, OpenMV, IBM Watson, SSML, Python, Node.js**, etc.
- Assisting Prof. Pedro Oliveira in teaching and preparing teaching materials. Meanwhile providing guidance and feedback for student projects



BLOCKSTACK PBC, NY DX & Business Consultant Feb - May 2020

- Interviewed 12 Blockchain/software engineers for a **developer experience study**
- Researched on **smart contract** and **app mining**, to come up with **Product Market Fit** strategies for **Decentralised Apps** developers.
- Collaborated with the **Head of Growth** and **Head of Developer Experience**, facilitated by **Union Square Venture** and **Stern Tech MBA**



SOUTH CHINA MORNING POST, HK Salesforce Developer Oct 2018 - Aug 2019

- Successfully retired and integrated two legacy sales systems within the designated 9-month timeframe by developing a Salesforce **SalesCloud** system in coordination with system vendor, using **Apex, SOQL, HTML, Javascript, SLDS**
- Responsible for data schema and integrity, leveraging **SQL, CSV, Excel, Putty**



CCCDI LTD., HK Intern Developer May 2017 - July 2017

- Developed 3 **AR** apps, with interactive data visualization capabilities, in **C# with Vuforia on Unity3D**