# Chen-Yu Chang

cchenyu.pro@gmail.com | (+886)-918-878-182

LinkedIn: https://www.linkedin.com/in/chen-yu-chang-53825b174/ | Portfolio: https://chen-yu-chang.github.io/My-Personal-Website/index.html

### **EDUCATION**

Boston University | Boston, MA

May 2022

Bachelor of Science in Computer Engineering, Minor: Statistics

GPA: 3.39/4.0

Coursework: Machine Learning, Algorithms, Smart & Connected System, Computer Architecture, Signal & Systems, High Performance Programming with Multicore and GPUs, Cybersecurity

#### **EXPERIENCE**

### Product Marketing Engineer | Texas Instruments | Sugar Land, TX

Sept 2022 - Jun 2023, Jan 2024 - Feb 2025

- Led new MCU definition with customer feedback and the need of peripherals and performance on new model vehicles
- Explored and visited worldwide automotive customers and Tier1s to promote and guide future EV architecture
- Hosted a webinar with MathWorks with 357 audience registered about Model Based Design on MCU support
- Expanded market share in new automotive field, including lighting, braking, BMS, zone, and increased 54% revenue
- Released products (F280015x, F28P55x, AM261x) and designed the campaign of application usage and differentiation

### Applications Engineer | Texas Instruments | Sugar Land, TX

Jun 2023 - Dec 2023

- Initiated the launch of new product F29x, including datasheet and whitepaper, and presented 20min on Eletronica panel
- Supported customer questions on peripherals, such as DCSM and PWM, within C2000 products
- Conducted and coded temperature testing on F28P65x die to differentiate the defects to push the launch of the product

YouTuber | Remote Managed to film videos sharing tech insights and overseas experience, reaching almost 3k subscribers Jun 2023 - Present

#### Video Production Director | FTSANE | Boston, MA (Remote)

Jun 2023 - May 2024

- Directed the team for video promotion on Instagram and YouTube with activity trailers and reviews
- Gained more influence and students in New England area to expand connections for activities and career

#### **PROJECT**

#### Beyond Air Tapping | Rtangent (Flutter, Unity, Python, Swift)

Sep 2021 - May 2022

- Engineered to project the 3D models onto the QR code on the hardware baton, where users can see through iOS app
- Created an iOS app allowing only authenticated admin to upload contents to project with different QR code

### Smoothie Dispenser (JavaScript, C/C++, Node.js)

Sep 2020 - Dec 2020

Integrated servos, thermistor, accelerometer, WebCam, Lidar, alphanumeric display to remotely drop smoothie to a container with a button on their phone

Greenmate App (Java) Sep 2019 - Dec 2019

- Designed an Android app that helps ecofriendly activity, including walking instead of driving and recycling
- Filmed a commercial tutorial and created main character for this app

### **PAPERS**

### The C29 CPU - Unrivaled Real-Time Performance with Optimized Architecture on C2000 MCUs

Evaluated the new C29 CPU's safety architecture restructure for application optimization and benchmarked real-time performance with competition\s to showcase the unrivaled product release

### **Breadth First Search Optimization** (C++, CUDA)

Tested BFS efficiency on CPU and GPU via cycle per element, and improved with blocking, parallelization, hybrid algorithm, and Dijkstra's algorithm

### Man in the Middle Attack: Principles and Tricks

Experimented different types of MITM (ARP, DNS, SSL) on virtual machine and researched for its cause and solutions

### **LEADERSHIP & ACTIVITIES**

### Cofounder of Broccoli's in the Fridge

Sept 2020 - Jan 2022

- Fully funded by Sustainability Seed Grant and BU-wide recognized food waste mitigator start-up, Boston, MA
- Created an app service for busy young adults to mitigate their food waste by a calendaring system of best use dates and recipe suggestions with Swift

Oct 2020 - Jan 2021 **Hyper Rocket Team** 

- Collaborated to design a hyper rocket and chose the appropriate components to reach its maximum height
- Coordinated the electrical group to design the microcontroller and connect them through Eagle
- Restructured the components of the rocket that improved the performance of simulations

## **SKILLS**

Language: MATLAB, C/C++, Python, JavaScript, Java, Node.js, Verilog, CSS, HTML, Swift