Tsao-Lun Chen (Arlen Chen)

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EDUCATION

National Taiwan University of Science and Technology

Taipei, Taiwan

Master of Electrical Engineering

Sep 2020 - present

• GPA: 3.99 (up to present)

• Thesis: End-to-end zero-shot learning

• Advisor: Shun-Feng Su

Yuan Ze University

Taoyuan, Taiwan

Sep 2016 - Jun 2020

Bachelor of Electrical Engineering

• GPA: 3.82

Projects

OPG Decomposition | Python

Oct 2021 - Present

- Utilized deep learning model to decomposed different layers (Tooth, Jaw, Sinus, and Nerve) from the OPG images.
- Proposed the GAN style model to decomposed the OPG image.
- Worked with MIT, Cornell, OSU, Radboud, and Doctor/Dentist in Taiwan to ensure the result makes sense and is useful.

Image Noise Distribute | Python

Sep 2020 - May 2021

- Optimized the Degan model by change the architecture in the generator part.
- Used the SSIM loss to ensure the generator output is good enough.
- Mixed different proportions of image noise(AWGN, SPIN, RVIN).

Work Experience

Podcast Producer Nov 2020 - Dec 2021

Top 100 in Taiwan Apple Podcast

• Explore topics related to college students. Through the guest experience sharing, to give college students more perspectives.

Student Intern May 2019 - Oct 2019

Industrial Technology Research Institute

Hsinchu, Taiwan

- Designed the sense amplifier for the computing in memory system.
- Measured the sensing current with different WLs in the STT-MRAM array.

Teaching Assistant

- Introduction to Intelligent Control, NTUST, Fall 2021
- Decision Support and Recommender Systems, NTUST, Fall 2021
- Programming Language, YZU, Spring and Fall 2020, Fall 2019
- Logic Circuit Lab., YZU, Fall 2019

Publication and Conference

- Chen, Tsao-Lun, and Wei-Tang Tseng. "Automatic Reference Current Architecture in Computing in Memory by MRAM." 2019 IEEE Eurasia Conference on IOT, Communication and Engineering (ECICE). IEEE, 2019.
- <u>Chen, Tsao-Lun</u>, and Chien-Cheng Lee. "Based on deep learning analyze brainwave signals of hand movements." 2019 Mobile Computing Workshop. MC2019.

TECHNICAL SKILLS

Programming Languages: Python, C/C++, R, Hspice, Matlab.

Domain Expertise: Computer Vision, Deep Learning, Zero-shot Learning, VLSI.

Develop Board: Arduino, Resberry Pi.

EDA System: Virtuoso.

AWARD

• Best conference paper in IEEE ECICE: Automatic Reference Current Architecture in Computing in Memory by MRAM, 2019