Hsiu-Chen (Connor) Yu

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EDUCATION

The Ohio State University, Columbus, OH ***Aug. 2025 — Present***
Master of Science in Computer Science and Engineering (CSE)

National Taiwan University of Science and Technology (NTUST), Taipei, Taiwan ***Sept. 2020 — Jun. 2024***
Bachelor of Science in Computer Science and Information Engineering (CSIE)
- Overall GPA: 3.89/4.30, Top 20% of CSIE Department

PROJECT/RESEARCH EXPERIENCE

AutoMLOps-Cloud: End-to-End Customer Purchase Prediction Pipeline [GitHub] Remote
An independent project developed while at Artifact Tech ***Feb. 2025 — June. 2025***
- **Architected** a production-grade MLOps pipeline on **AWS**, using **Step Functions** to automate the entire ML lifecycle from training to batch prediction
- Engineered a containerized (**Docker**) application for PyTorch & XGBoost models and established a CI/CD workflow with **GitHub Actions** for automated deployment to **Amazon SageMaker**.
- Developed and served the model via a **Flask-based** API, making customer behavior forecasts accessible through a SageMaker-compatible endpoint.

LERA-BFERT: Live Emotional Resonance Application [poster][report][GitHub] Taipei, Taiwan
University Project led by Prof. Bi-Ru Da, CSIE, NTUST ***Feb. 2023 — Dec. 2023***
- Led a team to develop a real-time audience engagement solution by implementing Dynamic Facial Emotion Recognition and micro-expression analysis, enabling emotional detection and displaying collective emotional responses to enhance viewer empathy.

MAE-DFER-CA: Enhanced Dynamic Facial Emotion Recognition with Attention [GitHub] Taipei, Taiwan
Undergraduate Research led by Prof. Bi-Ru Da, CSIE, NTUST ***Feb. 2023 — Dec. 2023***
- **Enhanced** the performance of self-supervised methods for Dynamic Facial Emotion Recognition (DFER) by incorporating the CA_Module from MMNET into the MAE-DFER model, enabling refined muscle motion pattern recognition with minimal computational cost.
- Increased model accuracy, achieving a WAR of 52.40 with a marginal rise in FLOPS (from 50G to 52G).

EXPERIENCE

Buckeye Autodrive, The Ohio State University– Columbus, OH ***Sept. 2025 — Present***
Perception Team Member
- Developing perception systems as part of OSU's entry in SAE/GM AutoDrive Challenge™ II, a four-year competition to design autonomous vehicles for urban driving.
- Focusing on 2D/3D models for environmental understanding using LiDAR and camera data in ROS pipelines.

Artifact Tech (App & Backend API Development**)**, Taichung, Taiwan ***Jan. 2024 — Mar. 2025***
Data Analysis Engineer
- Contributed to data analysis and backend development for LPG_CLOUD, enhancing gas tracking accuracy.
- Built web functions, including financial pages, using JavaScript, Python, and SQL, and integrated LINE Bot API to improve user interaction, gaining interest from five+ clients.

EXTRACURRICULAR ACTIVITIES

Volunteer, Digital Cultural Exchange Learning Project, **NTUST**, Taipei, Taiwan [post] ***Oct. 2023 — Jan. 2024***
- Mentored Kenyan students in AI software (Playground.ai) to develop ESG solutions.

Team Member, **E. SUN Commercial Bank**, Taipei, Taiwan [post] ***Oct. 2023 — Dec. 2023***
- Developed a sentiment analysis model by integrating facial expression detection and speech recognition to predict stock performance through corporate optimism.
- Won the **Merit Award** at the 2023 E.SUN BANK Business Proposal Competition.

SKILLS

- Programming: Python, C/C++/C#(Unity), Java, JavaScript, Typescript, SQL
- Software: PyTorch, TensorFlow, ROS, AWS, Docker, Git, Unity, OOP, Rest API, TypeORM
- Languages: English, Mandarin (Chinese)