# Hsiu-Chien (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).

#### **WORK EXPERIENCE**

Artifact Tech (App & Backend API Development), Taichung, Taiwan Data Analysis Engineer

Jan. 2024 — Mar. 2025

- 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.

#### **SELECTED COURSE PROJECTS**

**3D Reconstruction from Stereoscopic Images**, Computer Vision and Applications

May. 2024 — Jun. 2024

- Developed a Python and OpenCV program for 3D point reconstruction from stereoscopic images, ensuring accuracy with triangulation, camera parameters, and error checks.
- Generated and verified a color 3D point cloud in XYZ format using MeshLab.

Turing Compiler Development Using Robust Parsing, Compiler Design

Apr. 2023 — Jun. 2023

• Built an LALR(1) parser for the sT language using Lex and Yacc, performing semantic checks. Generated Java assembly code, successfully compiled into Java bytecode.

#### **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.

#### ADDITIONAL INFORMATION

- AI & Computer Vision: PyTorch, TensorFlow, OpenCV, Pandas, NumPy, MeshLab
- Cloud & DevOps: AWS, Docker, Git, TypeORM
- Programming: Python, C/C++/C#(Unity), Java, JavaScript, Typescript, SQL
- Software & Tools: VSCode, Visual Studio, Vim, Unity