# SHANG-YI CHUANG

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I am seeking full-time jobs in **Machine Learning Engineer** and **Data Scientist** in 2022!

## EDUCATION

**Cornell Tech** in the United States of America 2021 – Present
- M.Eng. in **Computer Science**
- Merit-Based Scholarship
- Courses: Algorithms and Data Structures for Applications; Applied Machine Learning; Deep Learning; Natural Language Processing; Data Science in the Wild; Networks and Markets; Virtual and Augmented Reality; Security and Privacy Concepts in the Wild

**National Taiwan University**, GPA: 3.86/4.30 2012 – 2017
- B.S., Major in **Mechanical Engineering**, Minor in **Electrical Engineering**
- Advanced Medical Device Lab, Advisor: Prof. Hao-Ming Hsiao
- Dean's List Award (Top 5% of the class in GPA)
- Courses: Engineering Mathematics; Computer Programming Language; Signal and Systems

**Osaka University**, Grade: Highest grade 2016 – 2017
- Frontier Lab Special Auditor in **Adaptive Machine Systems**
- Motor Intelligence Lab, Advisor: Prof. Tomomichi Sugihara
- Japan Student Services Organization Scholarship

## WORK EXPERIENCE

**Research Assistant at Academia Sinica** in Taiwan 2018 – 2021
Biomedical Acoustic Signal Processing Lab at Research Center for Information Technology Innovation
Advisor: Prof. Yu Tsao, Faculty Collaborator: Prof. Hsin-Min Wang
- Focused on real-world application of multimodal learning on speech enhancement.
- Published 5 papers including 1 top-notch IEEE/ACM journal and 4 conferences.
- Awarded ISCA and INTERSPEECH Travel Grant.
- Academic service including:
  - **Reviewer** of IEEE Signal Processing Letters 2021
  - **Reviewer** of IEEE/ACM Transactions on Audio, Speech, and Language Processing 2020

## SKILLS

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|---|---|
| **Programming Language** | Python, C, MATLAB, Bash, Visual Basic, LabVIEW, Verilog |
| **Machine Learning Framework** | PyTorch, Keras, TensorFlow, scikit-learn |
| **Feature Engineering** | Dlib, OpenCV, FFmpeg, SoX, Praat |

## PROJECTS

**Audio-Visual Speech Enhancement** 2018 – 2021
- Addressed additional processing costs and privacy problems.
- Improved the robustness of deep-learning-based systems in a car-driving scenario.
- Constructed the dataset of Taiwan Mandarin Speech with Video.

**Dynamics of Robot Arms** 2016 – 2017
- Smoothed the velocity profiles and trajectories of robot arms.
- Realized a safer human-robot environment by applying biological statistics results.