Chih-Ya Cheng

Educations

2020 – Present	**National Tsing Hua University (NTHU), Taiwan**, *Master program in Computer Science.*
2012 – 2016	**Chung Yuan Christian University (CYCU), Taiwan**, *Bachelor degree in Mechanical Engineering.*

Research Interests

Multimedia networking, 3D point cloud, Lidar, point cloud compression, and 3D model reconstruction, point cloud streaming.

Working Experience

2020 – Present	Research Assistant, Networking and Multimedia System Lab, Department of Computer Science, NTHU
2018 – 2019	BIOS Engineer, IOTG Team, AMI
	Providing workaround for issues
2017	Firmware Engineer, K-jump
	Implement I2C with GPIO of 8 bit MCU.
	Referring spec to setup system operation mode for power saving.
2016 – 2017	Mechanical Engineer, Lttcorp
	Mechanical components design, drawings and assemble.
	Helping to collect data for fire safety.

Research Experience

LiDAR Point cloud compression.
For a busy urban intersection, we want to compress the point cloud captured from LiDARs and offload it to the edge server for more calculation. We plan to leverage the redundancy within intra-sectors, inter-sector, and inter-frame through predictive coding enabled by motion estimation and implement a Priority transmission strategy.

Selected Coursework

Internet of Things: Technologies and Applications (A-), Advanced Discrete Structure (A+)

Computer Architecture (A+)