BO KAI HUANG

Taiwan | ndsl7109256@gmail.com | 0978048590 | linkedin | github.com/ndsl7109256

Education

National Yang Ming Chaio Tung University, M.S. in Computer Science Sept 2020 – Sept 2022

- **Poster:** ICLR 2023 Q-Pensieve: Boosting Sample Efficiency of Multi-Objective RL Through Memory Sharing of Q-Snapshots
- **Class project:**Accelerated the Demoaisacking algorithm with OpenMP, achieving over 3x speed improvement.

National Cheng Kung University, B.S. in Computer Science Sept 2016 – June 2020

- **Thesis:** Distance Transform on FPGA: Transfer webcam video to **FPGA** and communicate with C++ perform **Distance Transform**. It runs 67% faster than OpenCV library only.

Experience

Software Engineer, Trend Micro Oct 2022 –

- Designed an innovative batch processing solution for large-scale data transfers, segmenting records into gzip-compressed batches, reduced API timeouts by 23%
- Experienced in leading cross-team deployments, with our agent handling product rollouts for multiple teams and coordinating seamless, efficient communication across departments.

Awards

IC Contest 2018, 2019, 2020

Cell-Based Digital Circuit Design Category, ***Second Prize***, ***Third Prize***

- Calculate GPS distance using Haversine Formula
- Image Convolutional Circuit Design with ReLU function

Projects

Mado github.com/sysprog21/mado

Mado is an open-source library enabling advanced window system features for **resource-constrained embedded devices**. I contributed to
(1) Replaced pre-calculated **fixed-point** sine tables with a 5th order polynomial approximation, reducing code size by **65%**

(2) Enhanced window system by introducing GIF animation support.

(3) Enable Mado to function as a VNC-based graphical backend, supporting memory analysis with Valgrind and perf in headless environments wihout the dependency on traditional windowing systems

Tick Tac Toe with RL agent in C github.com/jserv/ttt

Developed a Tic-Tac-Toe game with a Temporal Difference reinforcement learning agent in C

Presentation

Random Number Generator Sharing Session link

Give a talk at COSCUP about how random numbers are generated, covering methods such as using stdlib, hardware random number generators (HWRNG), and **/dev/urandom in Linux**.

Technologies

Languages: C++, C