Chih-Chun Chang

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EDUCATION

UNIVERSITY OF WISCONSIN-MADISON   **Madison, WI**
PhD, Major in Electrical and Computer Engineering   -Present

NATIONAL TSING-HUA UNIVERSITY   **Hsinchu, TAIWAN**
MS, Major in Computer Science

NATIONAL TSING-HUA UNIVERSITY   **Hsinchu, TAIWAN**
BS, Major in Electrical Engineering

RESEARCH EXPERIENCE

UNIVERSITY OF WISCONSIN-MADISON
- Focus on parallel and heterogeneous computing for graph data and algorithms
- Published Paper:
  - Chih-Chun Chang, Tsung-Wei Huang, "uSAP: An Ultra-Fast Stochastic Graph Partitioner*", IEEE High-performance and Extreme Computing Conference (HPEC), 2023*

NATIONAL TSING-HUA UNIVERSITY
- Focused on the algorithm of memristor-based spiking neural network accelerators
  - Proposed an efficient training and inference algorithm on GPUs
  - Devised a hardware-aware training algorithm to recover the process variation
  - Thesis: Performance Improvements of Memristor-based Spiking Neural Networks with the Process Variation
- Focused on object detection algorithms on NVIDIA's embedded GPUs
  - Implemented YOLO models on the embedded GPUs and optimized them using an AI compiler (TVM)

NATIONAL TAIWAN UNIVERSITY AI, IoT, AND HCI CENTER
- Focused on the AI tool and HCI interface developments
  - Devised a face recognition system using transfer learning
  - Established an HCI interface for wearable devices and data visualization

WORK EXPERIENCE

HOPENGLISH   **Taipei, TAIWAN**
- Cooperated with user experience researchers to analyze large user data
- Devised a customer service system on AWS with ML algorithms to increase the company's revenue

DIGITAL DRIFT   **Hsinchu, TAIWAN**
- Established an accurate food classification model for mobile applications
- Optimized the memory footprint for the DNN model on IOS and Android

AWARD

INNOVATION AWARD in IEEE HPEC Challenge 2023
CHAMPION in NVIDIA Smart Embedded Robotics Challenge 2016

ADDITIONAL INFORMATION

- Technical Skills: C++ / CUDA