MIN-YAN HSIEH

Electrical Engineer & Software Engineer with 2+ years experience

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Major

- RISCV and ARM-Based CPU
- ESL and DFT Design
- Mix-Signal Circuit Design
- GPU and AI Accelerator Design
- AMBA and Bus Protocol
- Machine Learning, Deep Learning
- Compiler Design
- Quantitative Trading
- Computer Vision and Image Processing

Education

- **Sep 2023 - January 2024**
  National Yang Ming Chiao Tung University
  - Teaching Assistant in Phased-Locked Loops Courses
- **Sep 2022 - August 2024**
  National Yang Ming Chiao Tung University
  - Master Degree in Electrical and Computer Engineering
  - Advised by Prof. Chung-Chih Hung
- **Sep 2019 - June 2022**
  National Yang Ming Chiao Tung University
  - Bachelor's Degree in Electrical and Computer Engineering
  - Graduate within only 3 years

Experience

Silicon Engineer & Software Engineer, Taiwan Electronic System Design Automation(TESDA) June 2023 - Present

UVM, Test Plan, Design Verfication, Computer Architecture, Compilter Design, RISCV, DLA, GPU, AHB, AXI, PCIe, MIPI, DDR5

- ESL and DFT Design, RISCV CPU and SoC Design Verification
- NPU, APU and Deep Learning Accelerator(DLA) Development and Verification
- AMBA Protocol and SPI, UART, I2C, JTAG, PCIe, MIPI, UCIe and DDR5
- Core, Cache, Fabric, Memory, Codec

Project Manager(PM), Google Developer Student Club(GDSC) Core Team, September 2023 - June 2024

HTML, CSS, Javascript, jQuery, PHP, .NET, Database, Algorithm, Machine Learning, Deep Learning

- A website that helps us to optimize the school timetable and maximize the general courses we may get
- Use AI to generate a customized and suitable timetable for every student

World Quant Brain,WorldQuant Research Consultant, September 2023 - Present

Quantization Trading, Alpha Strategy, Automated trading, High Frequency Trading

- Develop Diverse Alpha Analyze, and Optimize for Performance
- WorldQuant Research Consultant for Advanced Alpha analysis

All Digital Phase-Locked Loop Program Research Assistant, Novatek Microelectronics Corp. Sep 2022 - August 2024

Matlab, Simulink, Virtuoso, Tapeout, ADC, PLL, PCB Design, Digital Signal Processing(DSP), Delta-Sigma Modulator(DSM)

- Research about fractional Digital Phase-Locked Loop
- Low power and low noise ADPLL applied to RF systems

Computer Vision Development Intern, Industrial Technology Research Institute(ITRI) May 2023 - June 2023

Python, Pytorch, Tensorflow, Machine Learning, Deep Learning

- Use Deep Learning technique to realize object detection
- Image recognition to fulfill the unmanned store

Special Topics in Analog Mixed-Signal Circuit Design, MediaTek September 2022 - January 2023

HSPICE, Matlab, Virtuoso, ADC, SerDes, PLL, CTLE, CDR

- Flash ADC, SAR ADC, Delta-Sigma ADC, Pipelined ADC Design
- CTLE, RX DFE, CDR, Driver, Serializer, Multiplexer, TX FIR Design
- PLL and Ring Oscillator Design

Summer Internship Program in IC Design, RICHTEK Technology July 2022 - August 2022

HSPICE, Finesim, Virtuoso, Spectre, Oscilloscope, Hall Transducer

- Two-stage OP, Folded-cascoded OP, LDO analysis and simulation
- Oscillator and bandgap reference circuit analysis
- IC Measurement