# **KUAN-YU CHANG**

## VERIFICATION IP DESIGN ENGINEER

Avery Design Systems, Inc. No. 76, Section 1, Zhongxiao E Rd Zhongzheng Dist., Taipei City, Taiwan

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#### PROFESSIONAL EXPERIENCES

#### Verification IP (VIP) Design Engineer

Upper Layer Group of PCI Express (PCIe) VIP Team Avery Design Systems, Inc., Taiwan<sup>1</sup> Jul. 2021 - present



- Focus on the Next Generation Protocols
  - · Enhance VIP to support FLIT mode for upper layers of the PCIe 6.0 architecture
  - · Develop Streaming Fabric Interface (SFI) Bus Functional Model
- Customer support of product usage
- Compliance test case design

### **EDUCATION**

#### National Tsing Hua University, Hsinchu, Taiwan

Advisor: Prof. Chun-Yi Lee

- M.S. in Computer Science Jun. 2021
  - Thesis Title: Mapping Nearest Neighbor Compliant Quantum Circuits onto a 2-D Hexagonal Architecture [NDLTD]
- B.S. in Interdisciplinary Program of Science Jun. 2017
  - Double expertise in Computer Science and Chemistry



Programming Languages Software & Tools Operating Systems C/C++, SystemVerilog, Verilog, Bash, Perl, Python Docker, LaTeX, MS Office Ubuntu, CentOS, macOS, MS Windows

### **PUBLICATIONS**

- [1] *K.-Y. Chang* and C.-Y. Lee, "Mapping Nearest Neighbor Compliant Quantum Circuits onto a 2-D Hexagonal Architecture," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 41, no. 10, pp. 3373–3386, Oct. 2022, ISSN: 1937-4151. DOI: 10.1109/TCAD.2021.3127868.
- [2] Y.-H. Chang, *K.-Y. Chang*, H. Kuo, and C.-Y. Lee, "Reusability and Transferability of Macro Actions for Reinforcement Learning," *ACM Transactions on Evolutionary Learning and Optimization (TELO)*, vol. 2, no. 1, Apr. 2022, ISSN: 2688-299X. DOI: 10.1145/3514260.
- [3] Y.-M. Chen, *K.-Y. Chang*, C. Liu, T.-C. Hsiao, Z.-W. Hong, and C.-Y. Lee, "Composing Synergistic Macro Actions for Reinforcement Learning Agents," *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, pp. 1–8, 2022. DOI: 10.1109/TNNLS.2022.3213606.



<sup>&</sup>lt;sup>1</sup>Siemens Digital Industries Software acquired Avery Design Systems, Inc. in March 2023. [Read more]