SIYUAN LIANG

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EDUCATION

The Chinese University of Hong Kong Aug 2022 - Present
Ph.D. in Computer Engineering (Expected in 2026) GPA: 3.68/4.0

Xi'an Jiaotong University Aug 2018 - Jul 2022
B.E. in Electrical Engineering (Elite Class) GPA: 3.78/4.3
Selected Honors/Awards:
  - Honorary Graduate   -Yuejie Academic Elite Scholarship (2018-2022)
  - Meritorious Winner of MCM-2020 (Mathematical Contest In Modeling)

EXPERIENCES

Xi'an Action Electronics Co., Ltd, Assistant Software Engineer Jul 2021 - Aug 2021
Duties: Developing power control simulation software for PV arrays

Loten Semiconductor Co., Ltd, Assistant Hardware Engineer Jun 2019 - Aug 2019
Duties: Testing and calibrating samples, managing laboratory samples, arranging cargo delivery

PUBLICATIONS

[8] Late Breaking Results: Efficient Built-in Self-Test for Microfluidic Large-Scale Integration (mLSI)
M.C. Li, H.C. Gu, Y.S. Zhang, **S.Y. Liang**, H. Gasvoda, R. Altay, I. Araci, T.-M. Tseng, T.-Y. Ho and U. Schlichtmann, The 61th Design Automation Conference (**DAC**), 2024.

[7] LaMUX: Optimized Logic-Gate-Enabled High-Performance Microfluidic Multiplexer Design
S.Y. Liang, Y.S. Zhang, R. Altay, H. Gasvoda, M.C. Li, I.E. Araci, T.-M. Tseng, U. Schlichtmann, T.-Y. Ho, The 61th Design Automation Conference (**DAC**), 2024.

[6] Rotor Angle Stability Prediction using Temporal and Topological Embedding Deep Neural Network Based on Grid-Informed Adjacency Matrix
P.Y. Sun, L. Huo, X. Chen, **S.Y. Liang**, Journal of Modern Power Systems and Clean Energy, 2023.

[5] ARMM: Adaptive Reliability Quantification Model of Microfluidic Designs and Its Graph-Transformer-Based Implementation
S.Y. Liang, M.Lian, M.C. Li, T.-M. Tseng, U. Schlichtmann, T.-Y. Ho, The 42nd IEEE/ACM International Conference on Computer-Aided Design (**ICCAD**), 2023.

[4] Optimal Inter-area Oscillation Damping Control: A Transfer Deep Reinforcement Learning Approach with Switching Control Strategy
S.Y. Liang, L. Huo, X. Chen, P.Y. Sun, arXiv preprint arXiv:2301.09321, 2023.

[3] CoMUX: Combinatorial-Coding-Based High-Performance Microfluidic Control Multiplexer Design
S.Y. Liang, M.C. Li, T.-M. Tseng, U. Schlichtmann, T.-Y. Ho, The 41st IEEE/ACM International Conference on Computer-Aided Design (**ICCAD**), 2022.

[2] Fast Transient Stability Prediction Using Grid-informed Temporal and Topological Embedding Deep Neural Network
P.Y. Sun, L. Huo, **S.Y. Liang**, X. Chen, arXiv preprint arXiv:2201.09245, 2022.

[1] Finite Element Analysis based Optimized Vehicle Mounted Antenna Deployment
S.Y. Liang, Y.S. Li, C. Gao, 2021 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting (**APS/URSI**), 2021.

TEACHING

TA of ENGG 2440A Discrete Mathematics Sep 2022 - Dec 2022, Sep 2023 - Dec 2023
TA of ENGG 2780A Statistics for Engineers Jan 2023 - May 2023
TA of ENGG 1003 Digital Literacy and Computational Thinking Jan 2024 - May 2024