Zhaori Bi, Ph.D.

zhaori_bi@fudan.edu.cn
https://bzr2915.github.io/bzr2915

Employment History

Jun. 2018 –	**Assistant Researcher,** Fudan University, Shanghai
Jun. 2016 – Aug. 2016	**Design Automation Engineer Intern,** AMS-AG, Plano, TX
Jun. 2013 – May 2017	**Teaching Assistant,** The University of Texas at Dallas.

Education

Aug. 2013 – Dec. 2017	**Ph.D. Computer Engineering** The University of Texas at Dallas, Richardson, TX., Advisor: Dr. Dian Zhou Thesis: *Efficient and Quality Assured Techniques for Analog Circuit Design Automation*
Aug. 2011 – May 2013	**M.Sc. Electrical Engineering** The University of Texas at Dallas, Richardson, TX., Advisor: Dr. Dian Zhou Thesis: *Near Field Communication System Design with A Circuit Implementation*
Sep. 2009 – Jun. 2011	**B.A.(Second Degree), English Language and LiteratureLetters** Huazhong University of Science and Technology, Wuhan, Hubei.
Sep. 2007 – Jun. 2011	**B.Eng., Electronic Information Engineering** Wuhan University of Technology, Wuhan, Hubei.

Research Publications

Journal Articles

1. B. He, S. Zhang, Y. Wang, T. Gao, F. Yang, C. Yan, D. Zhou, **Z. Bi**, and X. Zeng, "A batched bayesian optimization approach for analog circuit synthesis via multi-fidelity modeling," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, 2022.
2. Y. Wang, **Z. Bi**, Y. Xie, T. Wu, X. Zeng, S. Chen, and D. Zhou, "Learning from highly confident samples for automatic knee osteoarthritis severity assessment: Data from the osteoarthritis initiative," *IEEE Journal of Biomedical and Health Informatics (JBHI)*, vol. 26, no. 3, pp. 1239–1250, 2021.
3. G. Ye, W. Yang, **Z. Bi**, L. Huang, and F. Liu, "Effects of a high-phosphorus diet on the gut microbiota in ckd rats," *Renal Failure*, vol. 43, no. 1, pp. 1577–1587, 2021.
4. G. Ye, J. Zhang, **Z. Bi**, W. Zhang, M. Zhang, Q. Zhang, M. Wang, and J. Chen, "Dominant factors of the phosphorus regulatory network differ under various dietary phosphate loads in healthy individuals," *Renal Failure*, vol. 43, no. 1, pp. 1076–1086, 2021.
5. W. Zhang, Q. Du, J. Xiao, **Z. Bi**, C. Yu, Z. Ye, M. Wang, and J. Chen, "Modification and validation of the phosphate removal model: A multicenter study," *Kidney and Blood Pressure Research*, vol. 46, no. 1, pp. 53–62, 2021.
6. W. Zhang, G. Ye, **Z. Bi**, W. Chen, J. Qian, M. Zhang, D. Ding, M. Wang, and J. Chen, "Higher one-year achievement rate of serum phosphate associated with lower cardiovascular mortality in hemodialysis patients," *BMC nephrology*, vol. 22, pp. 1–10, 2021.

7. **Z. Bi**, M. Wang, L. Ni, G. Ye, D. Zhou, C. Yan, X. Zeng, and J. Chen, "A practical electronic health record-based dry weight supervision model for hemodialysis patients," *IEEE Journal of Translational Engineering in Health and Medicine(JTEHM)*, vol. 7, pp. 1–9, 2019.
8. M. Zhang, **Z. Bi**, X. Fu, J. Wang, Q. Ruan, C. Zhao, J. Duan, X. Zeng, D. Zhou, J. Chen, *et al.*, "A parsimonious approach for screening moderate-to-profound hearing loss in a community-dwelling geriatric population based on a decision tree analysis," *BMC geriatrics*, vol. 19, no. 1, pp. 1–11, 2019.
9. **Z. Bi**, D. Zhou, S.-G. Wang, and X. Zeng, "Optimization and quality estimation of circuit design via random region covering method," *ACM Transactions on Design Automation of Electronic Systems (TODAES)*, vol. 23, no. 1, pp. 1–25, 2017.
10. Y. Yang, H. Zhu, **Z. Bi**, C. Yan, D. Zhou, Y. Su, and X. Zeng, "Smart-msp: A self-adaptive multiple starting point optimization approach for analog circuit synthesis," *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)*, vol. 37, no. 3, pp. 531–544, 2017.
11. L. Qian, **Z. Bi**, D. Zhou, and X. Zeng, "Automated technology migration methodology for mixed-signal circuit based on multistart optimization framework," *IEEE Transactions on Very Large Scale Integration (VLSI) Systems (TVLSI)*, vol. 23, no. 11, pp. 2595–2605, 2014.

Conference Proceedings

1. X. Fu, C. Yan, **Z. Bi**, F. Yang, D. Zhou, and X. Zeng, "A batch bayesian optimization approach for analog circuit synthesis based on multi-points selection criterion," in *2022 IEEE International Symposium on Circuits and Systems (ISCAS)*, IEEE, 2022, pp. 2886–2890.
2. J. Zhao, C. Yan, **Z. Bi**, F. Yang, X. Zeng, and D. Zhou, "A novel and efficient bayesian optimization approach for analog designs with multi-testbench," in *2022 27th Asia and South Pacific Design Automation Conference (ASP-DAC)*, IEEE, 2022, pp. 86–91.
3. M. Li, **Z. Bi**, D. Zhou, and X. Zeng, "Analog circuit performance bound estimation based on extreme value theory," in *2015 IEEE 58th International Midwest Symposium on Circuits and Systems (MWSCAS)*, IEEE, 2015, pp. 1–4.
4. **Z. Bi**, W. Li, D. Zhou, X. Zeng, and S.-G. Wang, "Mixed-signal system verification by systemc/systemc-ams and hsim-vcs in near field communication tag design," in *2013 IEEE 10th International Conference on ASIC (ASCION)*, IEEE, 2013, pp. 1–4.

Books and Chapters

1. **Z. Bi**, *Efficient and Quality Assured Techniques for Analog Circuit Design Automation*. The University of Texas at Dallas, 2017.
2. **Z. Bi**, *Near field communication system design with a circuit implementation*. The University of Texas at Dallas, 2013.

Skills

Research Field	Numerical Optimization, Machine Learning, Design Automation.
Languages	Strong reading, writing and speaking competencies for English, Mandarin Chinese.
Coding	C/C++, VHDL/VERILOG/VERILOG-AMS, Python, Script Language (shell/tcl), LaTeX, Matlab
Simulation Tools	Cadence Tools, Synopsys Tools (HSPICE/ICC)
Misc.	Academic research, teaching, consultation.