

YAO Yuan (2nd Year, Power Management Unit Design)

Thesis Adviser: Prof. Wing Hung KI

Thesis Co-adviser: Prof. Chi Ying TSUI



► Education History:

- MPhil in ECE from HKUST
- MSc in ICDE from HKUST
- BEng in Electronic Science and Technology from Northeastern University

► Thesis Topic:

- Wireless Power Transfer for Implantable Biomedical Devices

Publication:

- Ge, X., Cheng, L., Yao, Y., & Ki, W. H. (2021). A 6.78 MHz Single-Stage Wireless Power Transmitter Using a 3-Mode Zero-Voltage Switching Class-D PA. *IEEE Transactions on Circuits and Systems I: Regular Papers*.
- Cheng, L., Ge, X., Hu, L., Yao, Y., Ki, W. H., & Tsui, C. Y. (2019). A 40.68-MHz active rectifier with hybrid adaptive on/off delay-compensation scheme for biomedical implantable devices. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 67(2), 516-525.
- Meng, X., Li, X., Zhong, X., Yao, Y., Tsui, C. Y., & Ki, W. H. (2019, June). A 2.2 μ W 600kHz Frequency-Locked Relaxation Oscillator with 0.046%/V Voltage and 48.69 ppm/ $^{\circ}$ C Temperature Stability for IoT Sensor Node Applications. In *2019 Symposium on VLSI Circuits* (pp. C44-C45). IEEE.
- Hu, L., Cheng, L., Yao, Y., Yim, T. S., Ki, W. H., & Tsui, C. Y. (2018, October). A 40.68 MHz active rectifier with hybrid delay compensation scheme. In *2018 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)* (pp. 501-504). IEEE.
- Yao, Y., Meng, X., Tsui, C. Y., & Ki, W. H. (2018, October). Polyimide-based flexible 3-coil inductive link design and optimization. In *2018 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)* (pp. 505-508). IEEE.
- Meng, X., Li, X., Yao, Y., Tsui, C. Y., & Ki, W. H. (2018, May). An indoor solar energy harvester with ultra-low-power reconfigurable power-on-reset-styled voltage detector. In *2018 IEEE International Symposium on Circuits and Systems (ISCAS)* (pp. 1-5). IEEE.

► Hobbies:

- Powerlifting
- Hiking
- Board game