

## Winners of Youth Innovation Awards of

## the Faculty of Information Technology, ZJU, 2022

### Winner Qu Wanyuan

With respect to the high-density power management integrated circuit design for processors, the researcher Qu has proposed three hybrid switching-mode power supply architectures for the 48V/12V/5V mainstream application domains, and made meaningful breakthroughs on the converter power density and efficiency. The related work has been published to the most prestigious conference on the integrated circuit field, the IEEE International Solid-State Circuit Conference (ISSCC), and awarded the ISSCC 2021 Silkroad Award and the ISSCC 2022 “DC-DC Converter” highlight paper, respectively.



### Winner Wang Zhibo

Prof. Wang has proposed the first privacy-preserving crowd sensing framework and developed a system security verification and evaluation platform. His academic achievements have promoted the trustworthiness and availability throughout the whole process of “perception-computation-service” for intelligent IoT. He has engaged in multiple national-level projects such as the NFC for Excellent Young Scholars. His research results have been widely reported by media including Yahoo & Science Net. The proposed technologies have been applied to top enterprises such as Huawei, Alibaba, etc.



### Winner Zhao Bandan

The researcher Zhao was supervised by Prof. Sir Richard H. Friend, the Cavendish Prof. of Physics in the University of Cambridge, UK. Her research results have been published in top academic journals including Nature Photonics, Nature Electronics, and Advanced Materials, etc. She has created efficiency records for perovskite LEDs. Recently, together with her collaborator, she has progressed in removing the critical concern that halide perovskite devices may be intrinsically unstable, paving the path towards real-world applications. Owing to her contributions to the field of perovskite optoelectronics, she has received many awards including MIT Technology Review "Innovators Under 35, China", Damo Academy Young Fellow, Forbes Under 30 China.

