

Chao Zhang



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Google scholar : <https://scholar.google.com.hk/citations?user=S-CdRusAAAAJ>
ORCID 0000-0002-9583-0722
Research interests: Low power EEG processing, Brain-machine interface
PhD thesis: Low power consciousness level evaluation based on prefrontal EEG

Education

2016.08-2020.06	Tsinghua University	Electronic Engineering	BS
2020.08-2025.06	Tsinghua University	Electronic Engineering	PhD

Awards

2019.10	Comprehensive Excellence Award of Tsinghua University
2022.10	Comprehensive Excellence Award of Tsinghua University
2022.10	Excellent Teaching Assistant Scholarship of Department of EE
2022.12	Excellent Teaching Assistant Scholarship of Tsinghua University

Publications as the first author or co-first author

SaleNet: A low-power end-to-end CNN accelerator for sustained attention level evaluation using EEG	ISCAS 2022	First author
Multi-Channel Multi-Domain based Knowledge Distillation Algorithm for Sleep Staging with Single-Channel EEG	TCAS-II 2022	Co-first author
Single-channel EEG completion using Cascade Transformer	BioCAS 2022	First author
Hydrogel Nanoarchitectonics of a Flexible and Self-Adhesive Electrode for Long-Term Wireless Electroencephalogram Recording and High-Accuracy Sustained Attention Evaluation	Advanced Materials 2023	Co-first author
Cepstral Analysis Based Artifact Detection, Recognition and Removal for Prefrontal EEG	TCAS-II 2023	Co-first author

On-going research

2022.03-2023.10	Design of a closed-loop SoC for sleep staging and optogenetic stimulation
2023.04-2024.04	Low power anesthesia depth monitoring system based on prefrontal EEG

Skills

Software: Python, Pytorch, Python-MNE
Hardware: Synopsys digital flow (VCS+DC+ICC)