# Jiajun Tang

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### **EDUCATION**

0	Princeton University Ph.D. in Electrical and Computer Engineering; CGPA: 3.93/4.00	Princeton, NJ Aug 2024 - Current
0	Peking University B. S. in Applied Physics, Department of EECS; CGPA: 89/100 (WES-calculated: 3.81/4.00)	Beijing, China Sep 2020 - Jul 2024
0	University of Michigan Visiting Scholar to Michigan Integrated Circuits Laboratory, Advisor: Prof. David Blaauw	Ann Arbor, MI Jun 2023 - Dec 2023

### SELECTED RESEARCH EXPERIENCE

## Low Power, Energy Efficient Temperature Sensor

Peking University

Research Assistant to: Prof. Xiyuan Tang

Feb 2024 - Jun 2024

- Designed a CMOS temperature sensor in TSMC 28-nm Process
- o Proposed a novel temperature-voltage transducer with high sensitivity and a 12-bit SAR ADC for quantization

# High Efficiency CMOS Digital Transmitter in Localization System

University of Michigan

Research Assistant to: Prof. David Blaauw

Jun 2023 - Dec 2023

- o Designed a CMOS Class-D power amplifier in TSMC 180-nm Process, with compact battery and antenna
- o Participated in satellite flyover tests, power amplifier chip measurement

## High Precision, Low Latency Capacitance-to-Digital Converter (CDC)

Peking University

Research Assistant to: Prof. Xiyuan Tang

Dec 2022 - Nov 2023

Sep, 2021

- $\circ$  Designed a CDC in TSMC 28-nm Process, in cooperation with PhD student Zilong in PRIME lab
- $\circ$  Modeled the  $\Delta\Sigma$  loop in MATLAB, designed the FIA amplifier and loop integrator

### **Publications**

- J. Tang and X. Tang, "A 12.6-pJ/Conversion Temperature Sensor with 0.98-mV/K Temperature-Voltage Sensitivity,"
   in IEEE Transactions on Circuits and Systems II: Express Briefs, Accepted.
- Z. Wang, B. Li, J. Tang, et al., "A 184.8dB FoMs 1.6MS/s Incremental Noise-Shaping Pipeline ADC with Single-Amplification-Based kT/C-Noise-Cancellation Technique," 2025 IEEE International Solid-State Circuits Conference (ISSCC), Accepted.
- Z. Shen, J. Tang, et al., "A 181.8dB FoMs Zoom Capacitance-to-Digital Converter with kT/C Noise Cancellation and Dead Band Operation," 2024 IEEE Custom Integrated Circuits Conference (CICC), Denver, CO, USA, 2024, pp. 1-2.

### SKILLS SUMMARY

- o Languages: Mandarin (Native); English
- o **Programming**: C++, Python, MATLAB

• Award for Academic Excellents at Peking University

o Circuit Design and Simulation: Cadence Virtuoso, HSpice, Verilog, Chisel, HFSS

#### Extra-curriculum Outreach

$\circ$ Teaching Assistant for course "Undergraduate Research Practice for Electronic Information Science"	Feb, $2024$	
<ul> <li>Vice President for the Students' Association for Science and Technology</li> </ul>	Sep, $2022$	
o Member of department's basketball team at Peking University	Sep, $2020$	
Honors and Awards		
• Merit Student and Third Prize Scholarship at Peking University	Sep, $2023$	
$\circ$ Third Award in the Final Competition of Integrated Circuit EDA Elite Challenge in China	$\mathrm{Dec},2022$	
• Award for Scientific Research Excellents at Peking University	Sep, $2022$	