



Ph.D. & Postdoc Recruitment

Energy Efficient Circuits for IoT Systems Group, ETH Zurich
Prof. Taekwang Jang

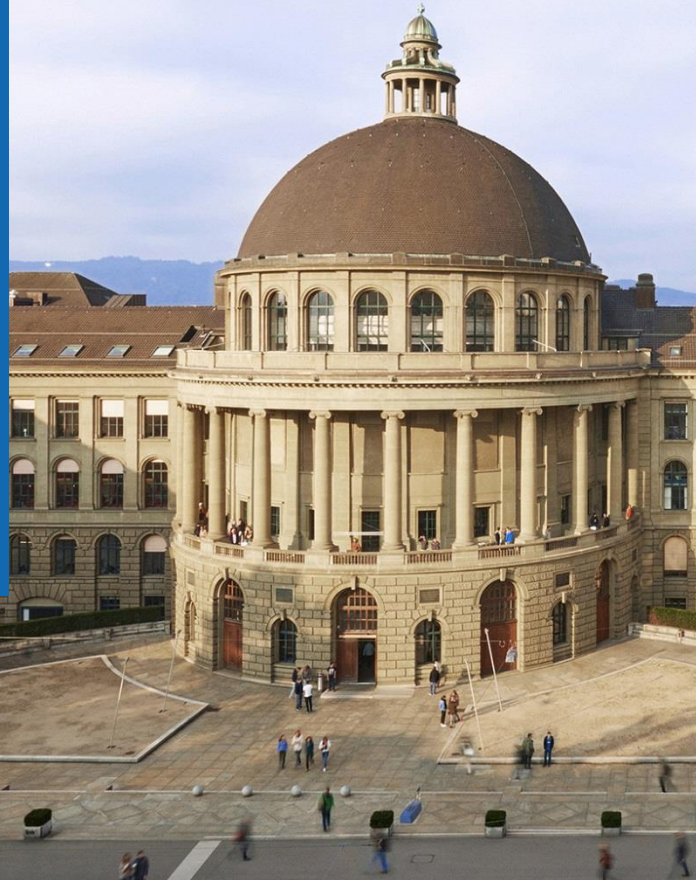
ETH Zurich at a glance

Founded 1855










- Driving force of industrialization in Switzerland

ETH Zurich today

- One of the world's leading universities for technology and the natural sciences
- Place of study, research and employment for 29,000 people from over 120 different countries



2022 QS Univ. EE

1		Massachusetts Institute of Technolog... Cambridge, United States
2		Stanford University Stanford, United States
3		University of California, Berkeley (UCB) Berkeley, United States
4		Nanyang Technological University... Singapore, Singapore
=5		ETH Zurich - Swiss Federal Institute of... Zürich, Switzerland
=5		University of Cambridge Cambridge, United Kingdom
7		Harvard University Cambridge, United States
8		National University of Singapore (NUS) Singapore, Singapore
9		University of Oxford Oxford, United Kingdom

2022 THE Univ. Engr.

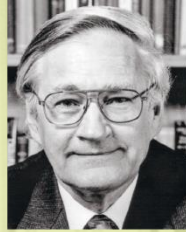
1	Harvard University United States
2	Stanford University United States
3	University of California, Berkeley United States
4	Massachusetts Institute of Technology United States
5	University of Cambridge United Kingdom
6	University of Oxford United Kingdom
7	Princeton University United States
8	California Institute of Technology United States
9	ETH Zurich Switzerland

Leading the way since 1855



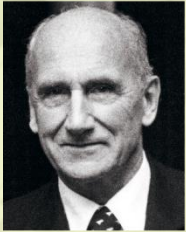
Kurt Wüthrich

In 2002 Kurt Wüthrich received the Nobel Prize in Chemistry for his development of Nuclear Magnetic Resonance Spectroscopy to determine the three-dimensional structure of biological macromolecules in solution.



Richard Ernst

In 1991 Richard Ernst won the Nobel Prize in Chemistry for his contribution to the development of Nuclear Magnetic Resonance Spectroscopy.



Vladimir Prelog

In 1975 Vladimir Prelog was awarded the Nobel Prize in Chemistry for his work in the field of stereochemistry of organic molecules and reactions.



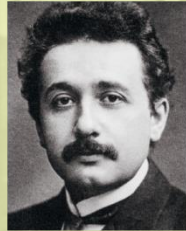
Wolfgang Pauli

In 1945 Wolfgang Pauli received the Nobel Prize in Physics for his discovery of the exclusion principle.



Leopold Ruzicka

In 1939 Leopold Ruzicka won the Nobel Prize in Chemistry for his work on polymethylene and higher terpene compounds.



Albert Einstein

In 1921 Albert Einstein was awarded the Nobel Prize in Physics for his discovery of the photoelectric effect.



Othmar Hermann Ammann, who studied civil engineering at ETH Zurich from 1898 to 1902, designed eleven bridges in the USA, including the famous George Washington Bridge in New York.



Prof. Luca Benini
Digital Circuits and Systems Group
IEEE/ACM Fellow, A. Richard Newton award etc.



Prof. Hua Wang
Integrated Devices, Electronics, and Systems
IEEE Fellow, DARPA Director's fellowship etc.



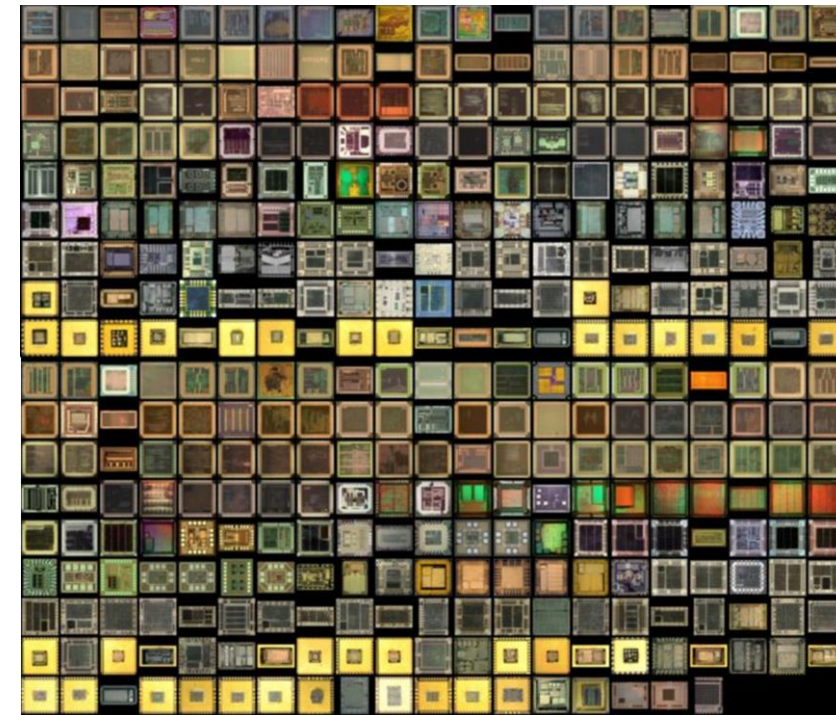
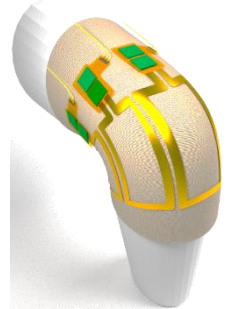
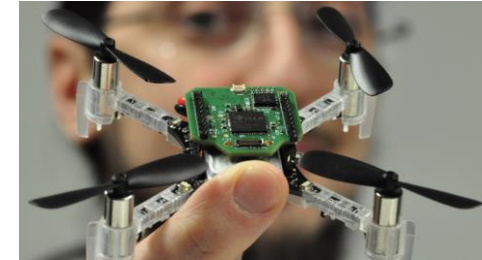
Prof. Christoph Studer
Integrated Information Processing
NSF Career Award, Google Best Paper Award etc.



Prof. Taekwang Jang
Energy Efficient Circuits and IoT Systems
TPC in ISSCC/ASSCC, ISSCC European Best Paper Award etc.



Microelectronics Design Center
Supports for chip design and testing
License, Tools, NDA, PDK, Server management



Assistant Professor, ETH Zürich, Switzerland**2018 – Now**

- Principal Investigator of Energy Efficient Circuits and IoT Systems Group
12 Members (11 Ph.D. + 1 Postdoc)
- Research: Miniaturized computers, Frequency synthesizers, Power converter

Member, Competence Center for Rehabilitation Engineering and Science (RESC)**2020 –Now****Engineer - Senior Engineer, Samsung Electronics Inc., Mixed-Signal Core Design Team****2008 –2013**

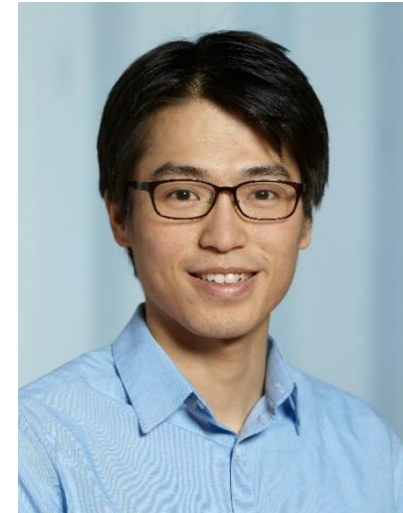
- PLL designs for application processors, sensors and data transceivers

Ph.D. in Electrical Engineering, University of Michigan**2013 –2017**

- Circuit and System Designs for Millimeter Scale IoT and Wireless Neural Recording

Highlights

- TPC member of IEEE ISSCC (IMMD), IEEE ASSCC (Analog), TPC subcommittee chair of RFIT (frequency generation)
- Chair of IEEE SSCS Switzerland Chapter
- Raised >3MCHF research grant (PI's share), including SNSF starting, ERC Horizon Digital, NIH Brain Initiative, Innosuisse Proj.
- 67 peer-reviewed conference and journal publications, 57 of which appeared at the flagship conferences and journals including *ISSCC*, *VLSI*, *CICC*, *ESSCIRC*, *ASSCC*, *JSSC* and *TCAS*
- 14 invited journal papers (*JSSC*, *TCAS-I*, *SSC-L*) from the conference papers
- 14 patents (11 issued in the U.S., 1 issued in the Switzerland and 2 issued in Korea)
- ISSCC 2021 Jan Van Vessel Award for Outstanding European Paper Award
- IEEE Transactions on Circuits and Systems 2009 Guillemin-Cauer Best Paper Award



Ph.D.

- Recruiting Period: Jan 2023 – Oct 2023
- No fixed application and start date
Apply and start the position at any time
- No school screening process
Send an email directly to
tkjang@ethz.ch & kmwettstein@ethz.ch
- Salary: ETH Level 4 (64.5 – 72.9 kCHF / year)
<https://ethz.ch/en/the-eth-zurich/working-teaching-and-research/welcome-center/employment-contract-and-salary/salary.html>
- M.S. degree required at the starting date
- Mandatory documents
CV, Transcript (BS & MS), 2 or more Rec letters
Any other relevant documents

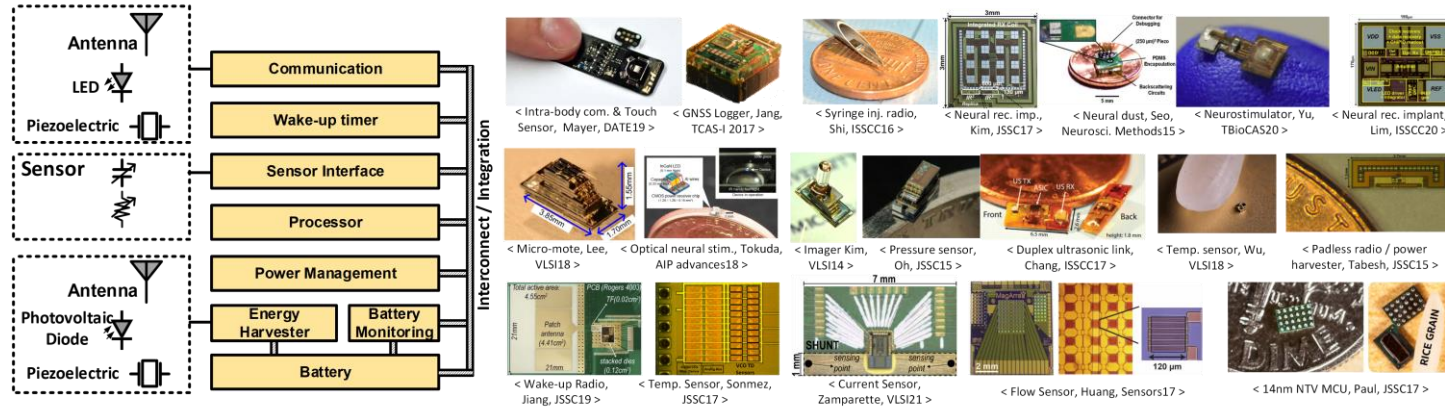
PostDoc

- Recruiting Period: Jan 2023 – Aug. 2023
- No fixed application and start date
Apply and start the position at any time
- No school screening process
Send an email directly to
tkjang@ethz.ch & kmwettstein@ethz.ch
- Salary: 89.1 – 98.1 kCHF / year
<https://ethz.ch/en/the-eth-zurich/working-teaching-and-research/welcome-center/employment-contract-and-salary/salary.html>
- Ph.D. degree required at the starting date
- Mandatory documents
CV, Transcript (BS, MS & PhD), 2 or more Rec letters
3 Major publications, any other relevant documents

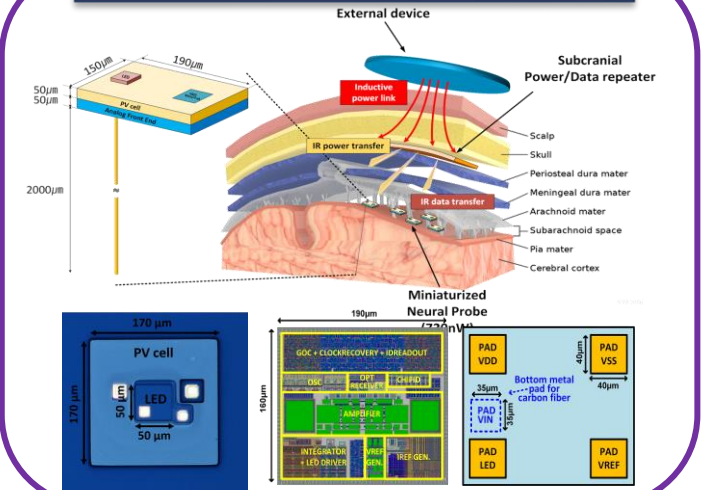
Looking for: *Self-motivated, Strong circuits background, Logical thinking, Open-minded, Thinking outside the box*

Research Topics for Open Positions

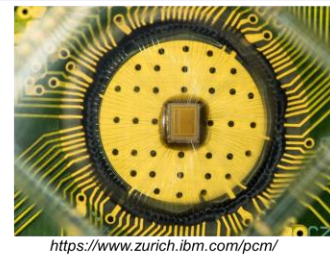
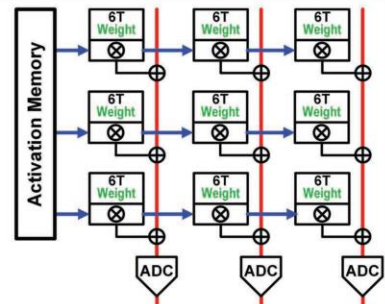
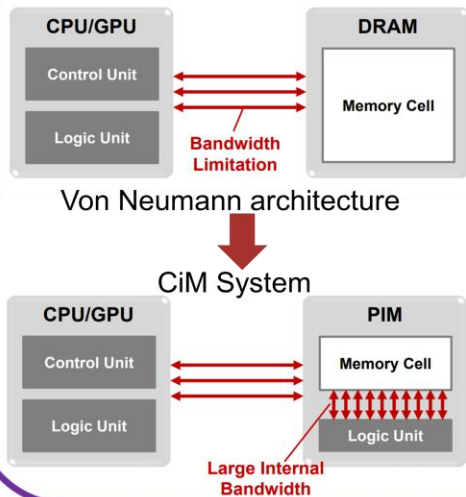
Circuits and Systems for Miniaturized Computer



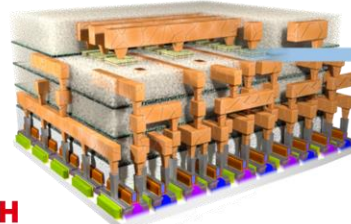
Wireless Neural Recording



Compute in-memory



PCM based CiM



FeFET based CiM

In partnership with

IBM, ST life.augmented, BOSCH

Spinal Fusion Implant



Spinal implant integrated with smart technology for real-time monitoring of spinal forces

In partnership with

Balgrist, 4medical, University Hospital

Consider Joining EECIS!



500m

- Located at the center of Zurich
- 10 min to major Zurich spots

Integrated Systems Laboratory



ISSCC 2019



Group Dinner 2022



D-ITET Building



Photo Taken from the Office