

2024 SSCS Chapters Luncheon

**Alvin Loke, Bill Bowhill, Makoto Ikeda, Jeremy Cosson-Martin,
Mehdi Saligane, Farhana Sheikh, Ashley Seda, Danielle Marinese,
Aeisha Van Buskirk, Adam Greenberg**

alvin.loke@ieee.org

February 20, 2024



Agenda

Time	Item	Presenter
12:00-12:10	Opening Remarks	Bill Bowhill, Makoto Ikeda
12:10-12:20	Chapter Awards	Bill Bowhill
12:20-12:50	Chapters Updates	Alvin Loke
12:50-13:10	SSCS Initiatives for Chapters Engagement	Jeremy Cosson-Martin, Mehdi Saligane, Zeynep Toprak Deniz (Farhana Sheikh)
13:10-13:20	Group Discussion / Q&A	All
13:20-13:30	Group Photo	All

Opening Remarks



Bill Bowhill
bill.bowhill@intel.com
2024-2025 SSCS President



Makoto Ikeda
ikeda@silicon.t.u-tokyo.ac.jp
2024-2025 SSCS VP Membership



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CHAPTER OF THE YEAR AWARD



Amel Neifar
Chair



Karim Abbes
Vice Chair



Brahim Mezghani
Treasurer





STUDENT BRANCH CHAPTER OF THE YEAR AWARD



Pooja Mohan Bengeri
Chair



Manoj Kumar C
Chair



Abinaya V R
Vice Chair



Vajra A
Vice Chair



Suriyan N
Secretary



Vidhula P
Secretary



Jayasri A
Treasurer



Shalmitha S
Treasurer



Yokeswaran S
Treasurer



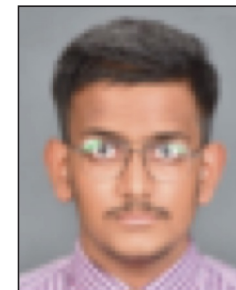
Akshaya A
Webmaster



Ragavi R
Webmaster



Sahana A
Webmaster



Sai Krish R J
Webmaster



L. Kurinjimalar
Faculty Advisor





STUDENT BRANCH CHAPTER OF THE YEAR AWARD



Anshaj Shrivastava
Chair



Dhrupadi Das
Treasurer



Aniket Banerjee
Vice Chair



Derick George
Secretary



Soham Lakhote
Webmaster



Kundan Kumar
Student Advisor



Utsav Banerjee
Faculty Advisor





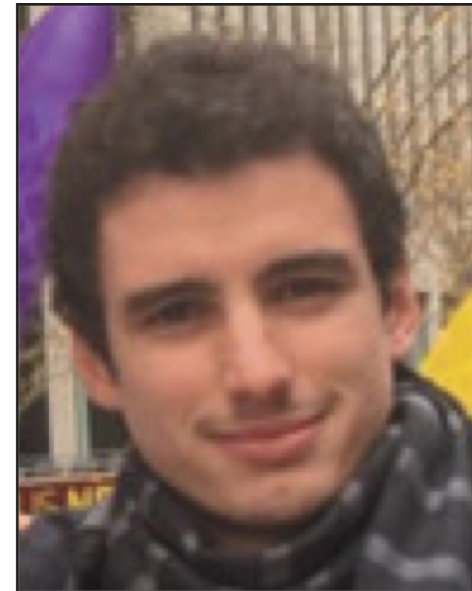
CHAPTER WITH BEST EDUCATIONAL PROGRAM AWARD



Ramy Tantawy
Chair



John Hribar
Secretary

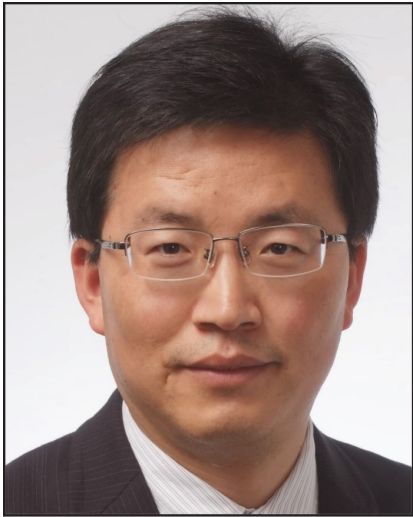


Roman Fragasse
Treasurer





CHAPTER WITH BEST EDUCATIONAL PROGRAM AWARD



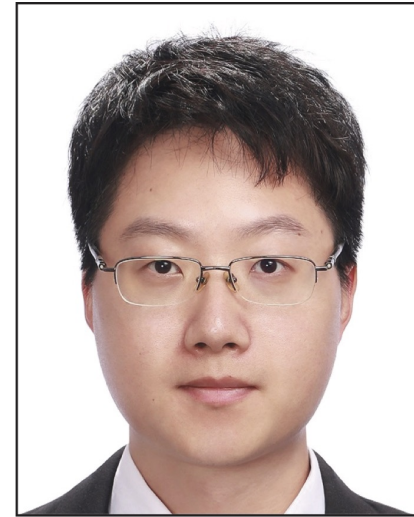
Kaixue Ma
Chair



Yu Luo
Vice Chair



Hongxing Zheng
Vice Chair



Fangyi Meng
Secretary



Feng Feng
Treasurer





CHAPTER WITH BEST WOMEN-IN-CIRCUITS PROGRAM AWARD



Sulthana Sayed
Chair



Aswini Shaji
Vice Chair



Anarkha A
Secretary



Jaseema Jasmin
Joint Secretary



Nandan S
Faculty Advisor



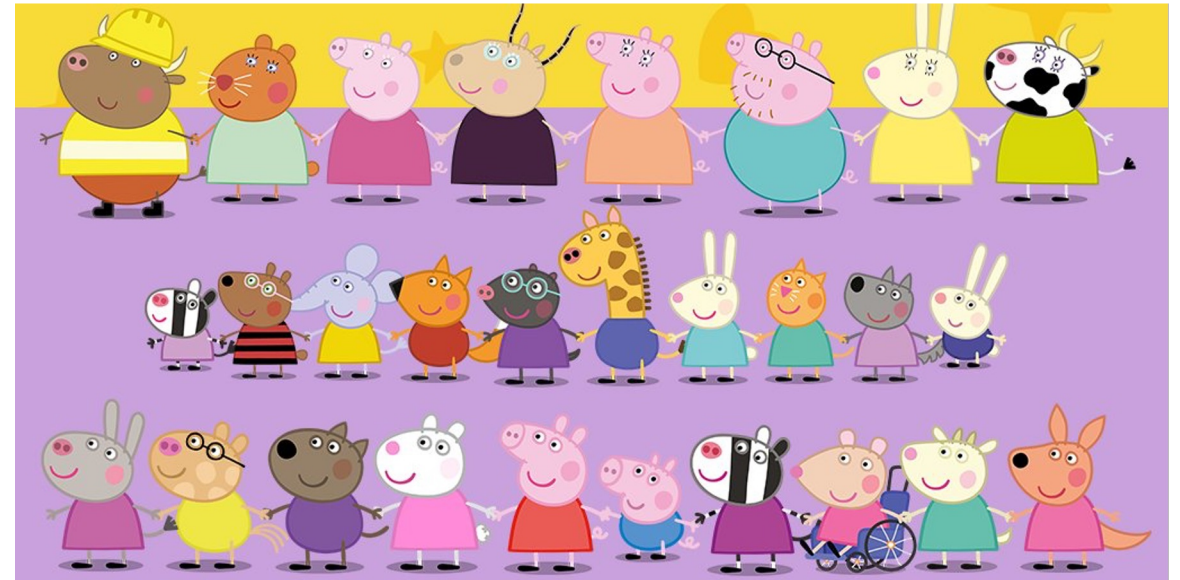
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You All Serve a Critical Role – THANK YOU!!!



Local Membership



SSCS Chapters Steering Committee



Alvin Loke
Chapters Chair
California, USA



Sergio Bampi
Brazil



Victor Grimblatt
Chile



Brahim Mezghani
Tunisia



Sandra Veljkovic
Serbia



Woogeun Rhee
China

RETIRING MEMBER

**Thank you for
your service!**



Makoto Nagata
Chapters Vice Chair
Japan



Bruce Doyle
Colorado, USA



Muhammad Hunain
Memon, China



Farhana Sheikh
Oregon, USA

- Established in Aug-2021
- Regional and gender diversity
- Student chapter inclusion



SSCS Staff



Ashley Seda
ashley.seda@ieee.org



Danielle Marinese
d.marinese@ieee.org



Aisha Van Buskirk
a.vanbuskirk@ieee.org

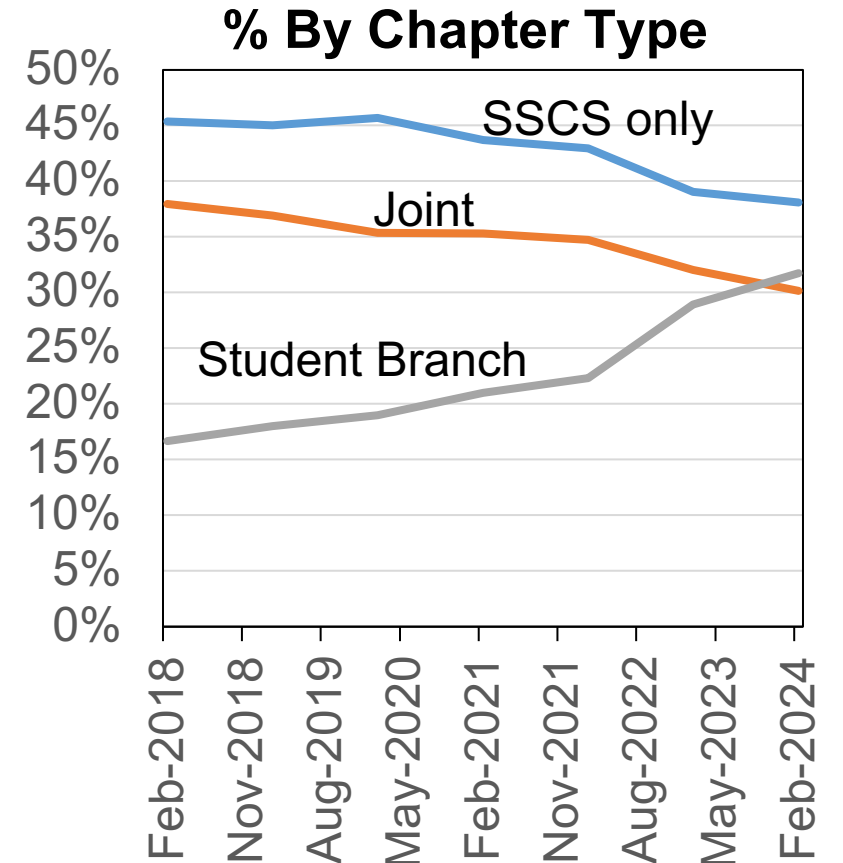
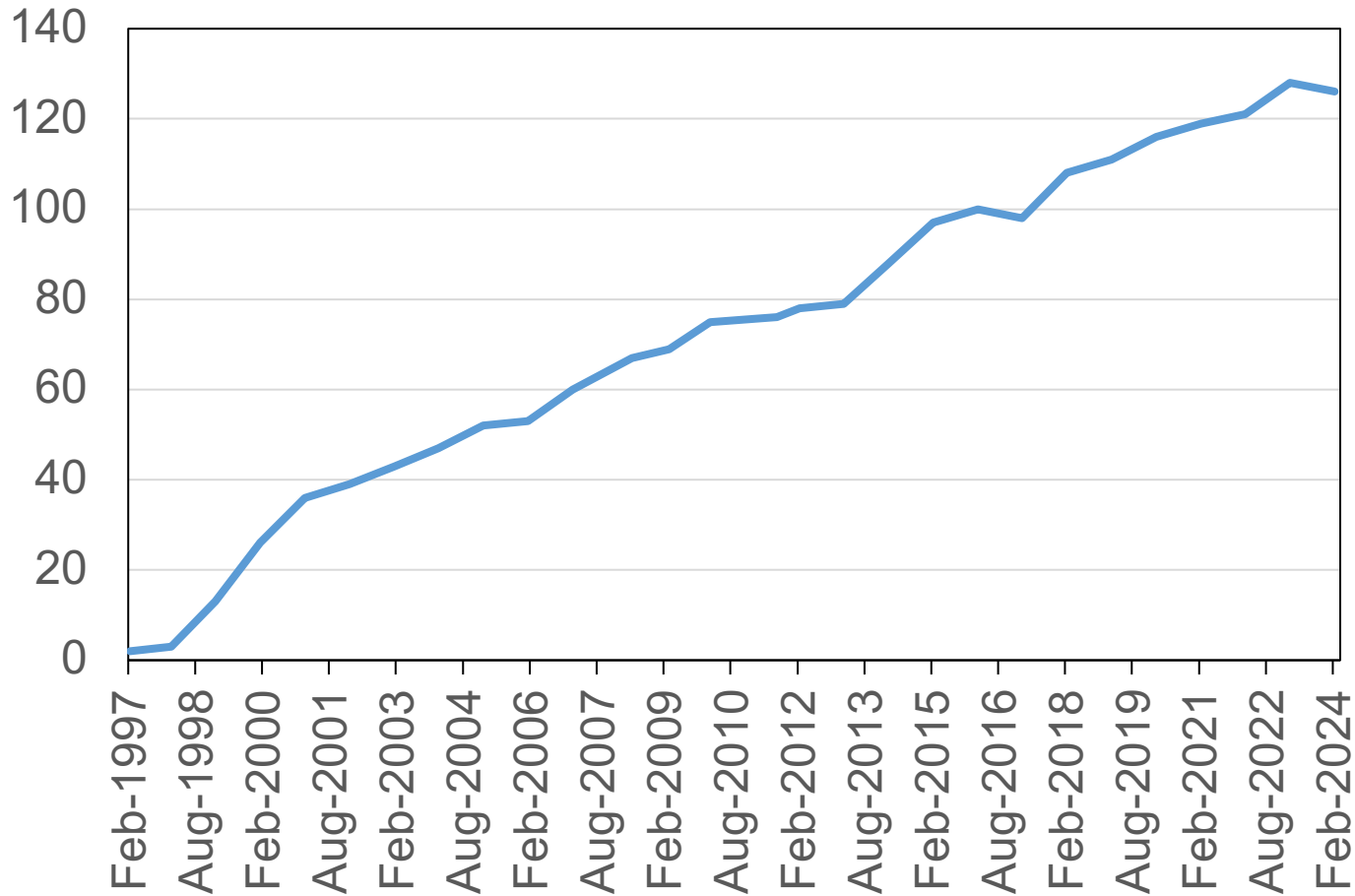


Adam Greenberg
Executive Director
a.Greenberg@ieee.org

Thank you for your amazing support!



126 Chapters Going Into 2024 (128 One Year Ago)



Healthy but aspiration is to maximize number of **active chapters** to maximize outreach to members!!!



New & Dissolved Chapters

- 6 new chapters formed in 2023 (1 Regular, 5 Student Branch)

1. Northern Virginia/Washington, USA Region 1-7
2. National School of Engineering of Sousse (ENISo), Tunisia
3. Higher Institute of Information and Communication Technologies (ISTIC), Plage Ejehmi, Tunisia Region 8
4. Federico Santa Maria Technical University, Valparaiso, Chile Region 9
5. BMS College of Engineering, Bangalore, India Region 10
6. St. Joseph's College of Engineering, Chennai, India

- 1 chapter dissolved in 2023 & resurrected in 2023 (Regular)

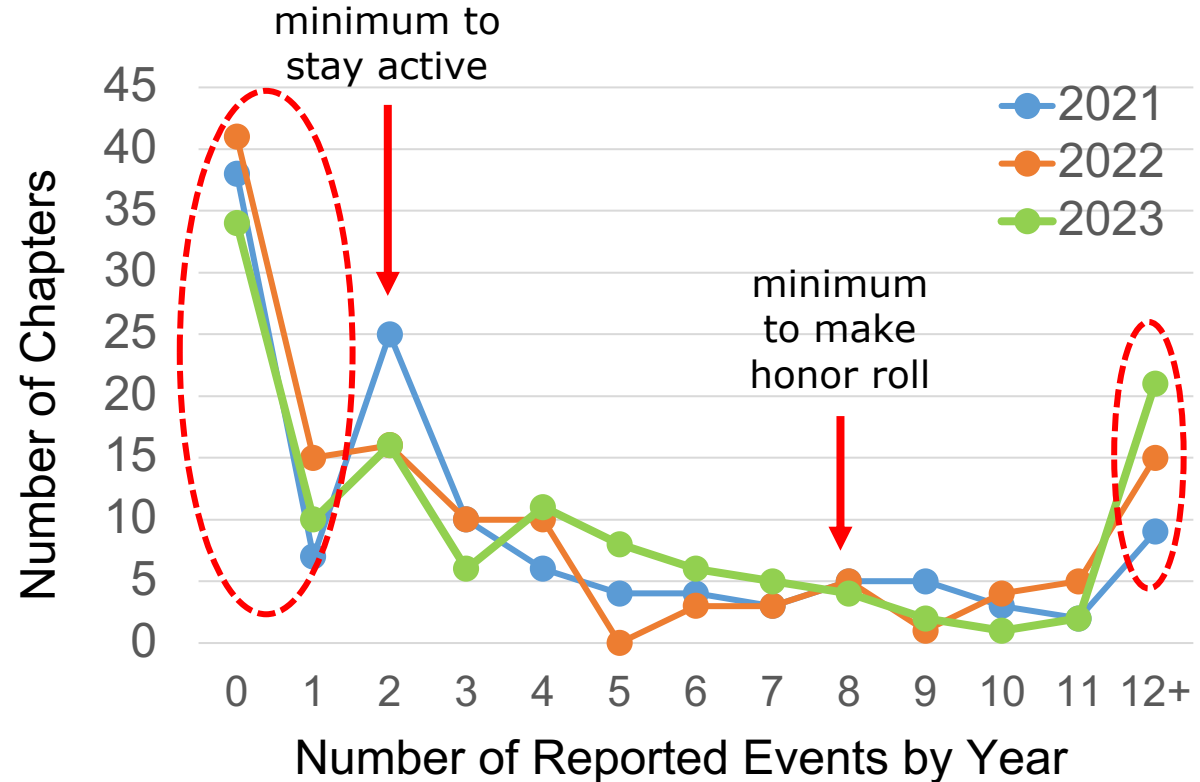
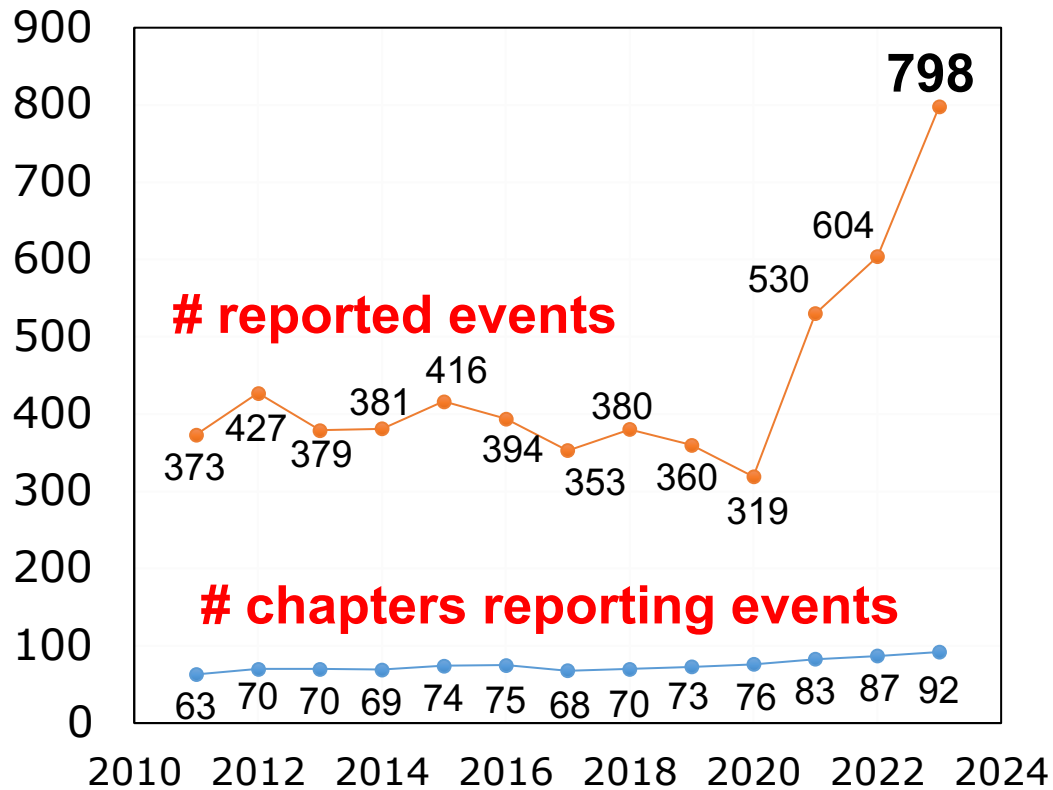
1. Phoenix, USA Region 1-7

- 8 inactive chapters dissolved



Activities Reported on vtools

- All chapters must report all activities and officer updates on vtools
- Vtools reporting required to qualify for new subsidy (new requirement since 2023)



Recognition – New Expanded Chapter Awards

- Second year offering expanded suite of awards
- Lots of even more qualified chapters not submitting nominations

No.	Award Name	Award Prize Per Chapter	2023 Recipients Recognized at ISSCC 2024 & Chapters Luncheon
1	Chapter of the Year	\$ 1,500	• Tunisia SSCS
2	Student Branch Chapter of the Year	\$ 1,000	• Indian Institute of Science Bangalore SSCS/CASS/CEDA/SYS Student Branch Chapter * • Sri Sai Ram Engineering College SSCS Student Branch Chapter *
3	Chapter with Best Educational Program	\$ 1,000	• Columbus SSCS/CASS Joint Chapter • Tianjin SSCS/APS/MTTS Joint Chapter
4	Chapter with Best Distinguished Lecturer Program	\$ 1,000	• No award given for 2023
5	Chapter with Best Women-in-Circuits Program	\$ 1,000	• LBS Institute of Technology for Women SSCS Student Branch Chapter * (first recipient!)
6	Chapter with Best Pre-University Outreach	\$ 1,000	• No award given for 2023

* Rookie-year chapter



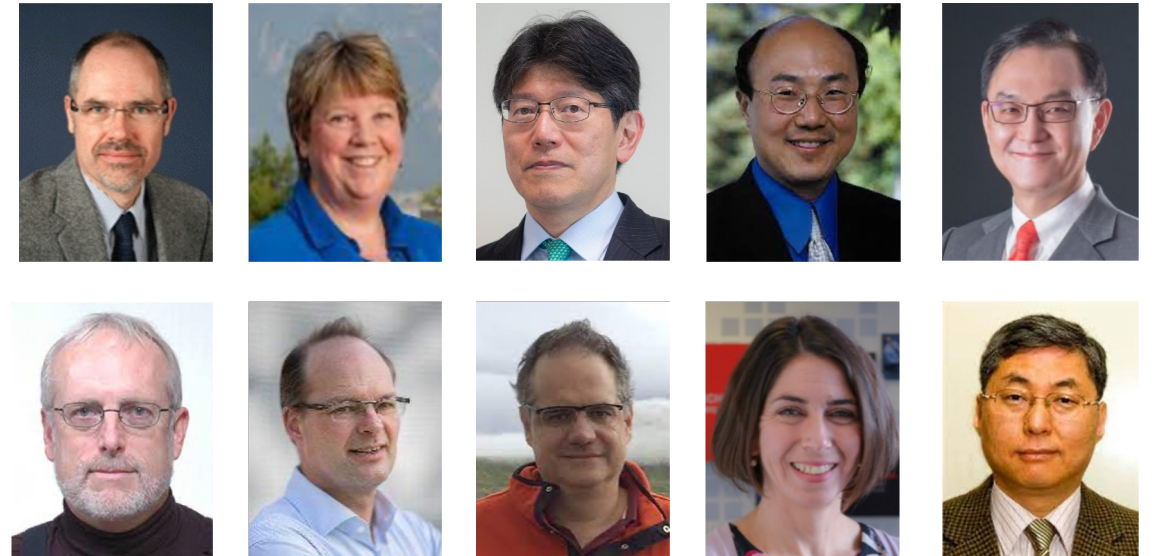
Recognition – Chapter Honor Roll

- Started in 2021 - <https://sscs.ieee.org/chapters/sscs-chapter-honor-roll>
- 2023 chapter honorees
 - Beijing Section - Tianjin
 - Bipin Tripathi Kumaon Institute of Technology
 - Central Texas Section
 - College of Engineering - Karunagappally
 - Columbus Section
 - Federico Santa Maria Technical University
 - France Section
 - Huazhong University of Science and Technology
 - Indian Institute of Science - Bangalore
 - Kansai Section
 - Kerala Section
 - Kolkata Section
 - Lahore Section
 - Malaysia Section – Penang
 - National Engineering School of Sfax (ENIS)
 - North Macedonia
 - Northern Virginia/Washington
 - Oregon Section
 - Poland Section
 - San Diego Section
 - Santa Clara Valley Section
 - Serbia And Montenegro Section
 - Sri Sai Ram Engineering College
 - Tainan Section
 - Tokyo/Japan Sections
 - Tunisia Section
 - UK and Ireland Section - Ireland
 - University of Niš
 - University of Science and Technology of China
 - Western Australia Section



Activities – Commemorative Lecturers for Transistor 75th Anniversary

- EDS and SSCS are jointly offering series of initiatives to commemorate the 75th anniversary of the transistor invention (Dec-1947)
- Elite roster to present in-person/virtual SSCS/EDS chapter talks that offer historical perspectives of transistors and their applications
- 10 SSCS Commemorative Lecturers
 - Christian Enz (EPFL, Switzerland)
 - Terri Fiez (U. Colorado – retired, USA)
 - Makoto Ikeda (U. Tokyo, Japan)
 - Thomas Lee (Stanford U., USA)
 - Nicky Lu (Etron, Taiwan)
 - Chris Mangelsdorf (ADI – retired, USA)
 - Bram Nauta (Twente U., Netherlands)
 - Carlo Samori (Politecnico Milano, Italy)
 - Viola Schaffer (TI, Germany)
 - Hoi-Jun Yoo (KAIST, Republic of Korea)



• **Thank you, speakers, for your service!!!**



Activities – 2024 Distinguished Lecturer (DL) Roster

2023 - 2024



Firooz Aflatouni



Sudipto Chakraborty



Fatih Hamzaoglu



Masum Hossain



Ping-Hsuan
Hsieh



Dongsuk Jeon



JooYoung Kim



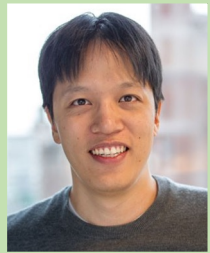
Andrea Mazzanti



Sugako Otani



Tim Piessens



Mingoo Seok



Farhana Sheikh



Alberto Valdes Garcia



Jeff Walling

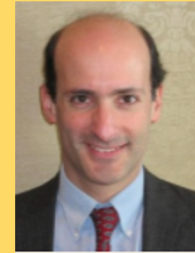


Zhengya Zhang

2024 - 2025



Wei Deng



Daniel Friedman



Keith Bowman



Timothy Dickson



Makoto Ikeda



Taekwang Jang



Hyun-Sik Kim



Makoto Nagata



Maurits Ortman



Shanthi Pavan



Shreyas Sen



Sai-Weng Sin



Vivienne Sze



Rabia Tugce
Yacicigil



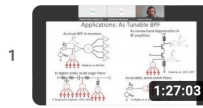
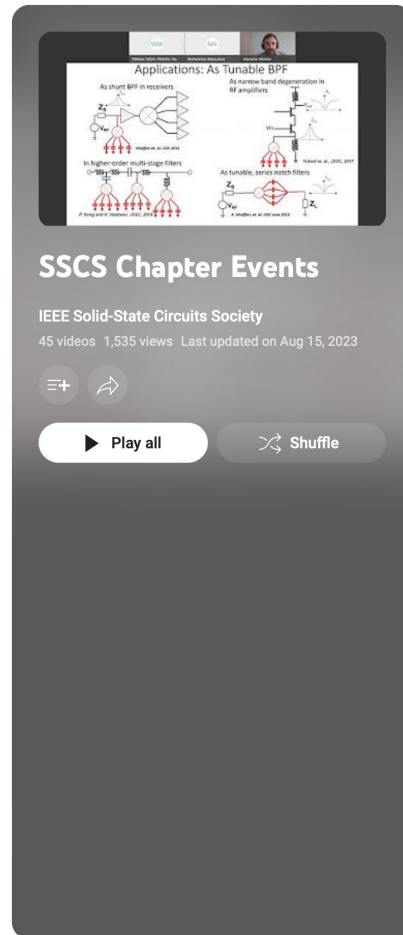
Jerald Yoo

Activities – Why Invite DLs

- Roster of well-known and established speakers
- SSCS (not chapter) pays for speaker's travel
- OK to live-stream DL talks
- Not OK to publicly post DL slides or video until speaker's term is over (make sure you have DL's approval to record talk and post later)
- Must include/inform Naveen Verma (nverma@princeton.edu) in invitation email to DL speaker
- Inform Ashley once DL is secured for posting to chapter website

Activities – YouTube Sub-Channel on Chapter Events

- Launched in April 2021 (linked to SSCS Channel)
- https://www.youtube.com/playlist?list=PLvYonHCKSWag8a_z2KH6XQVoeEI9GOQcw
- **Please contribute your chapter videos and/or reach out to Aeisha**



N-path Passive Mixers: Simple Circuits, Surprising Capabilities, Prof. Alyosha Molnar, 03/25/2022

San Diego Joint APS CAS EDS MTTT SSCS Chapter • 633 views • 6 months ago



Inspiring and Developing Tomorrow's Circuit Stars

IEEE Solid-State Circuits Society • 1K views • 1 year ago



SSCS Chapter Chairs & Officers Meeting (3-22-22)

IEEE Solid-State Circuits Society • 613 views • 1 year ago



Silicon: The playground for photons and electrons, by Dr. Sudip Shekhar

San Diego Joint APS CAS EDS MTTT SSCS Chapter • 592 views • 1 year ago



Maxwells Theory For Us Regular Folk, Dr. James Rautio

San Diego Joint APS CAS EDS MTTT SSCS Chapter • 1.5K views • 2 years ago



Energy Effective Graphene Based Computing - Prof. Sorin Cotofana, Delft University of Technology

IEEE Solid-State Circuits Society • 668 views • 2 years ago



Semiconductor Challenges In Realizing Full Benefit Of 5G mmWave & Extending Road map Into 6G

San Diego Joint APS CAS EDS MTTT SSCS Chapter • 479 views • 2 years ago



Insights Into Transceiver Design For 5G mmWave UE Applications, Dr. Venu Bhagavatula

San Diego Joint APS CAS EDS MTTT SSCS Chapter • 1.4K views • 2 years ago



Communication – Chapters Brief E-Newsletter

- Two issues per year, inaugural issue in 2022
- Content
 - Message from SSCS Chapters Chair
 - Meet the SSCS Chapters Team
 - SSCS 2021 Outstanding Chapter Award Recipients
 - SSCS Chapter Honor Roll
 - Officer Reporting – New Officer and Officer Changes
 - Reminder to Submit Chapter Activities to vtools
 - SSCS Tools & Links for Chapters
 - SSCS Distinguished Lecturer
 - SSCS Products for Chapters
 - Chapter Subsidies - Update
 - Call for Chapter News
 - Meet a Chapter Chair
- Resource to make announcements for other SSCS groups/activities, e.g., SS CD events, WiC, diversity, host-location chapters reach out to conferences



SSCS Chapters Brief Volume 1, Issue 1



Message from the SSCS Chapters Chair

Welcome to the inaugural edition of the SSCS Chapters Brief, a quarterly newsletter specifically designed to keep you up-to-date on important information and resources for running your chapter. If you have suggestions on what you would like to see in future editions or how SSCS can help, we would love to hear your feedback. You play the essential role of bridging our society to your local membership. Thanks for all that you do and keep up the fantastic energy!

Alvin Loke (alvin.loke@ieee.org)
SSCS Chapters Chair



Finance – Chapter Subsidies

Year	Number of Requesting Chapters	Total Requested	Total Approved	Chapter Awards	Pre-University & University Outreach	Budget Allocated (excluding chapter luncheons)	Budget Used
2021	36	\$ 60,886	\$ 70,100	\$ 1,000		\$ 76,400	
2022	43	\$ 64,970	\$ 67,100	\$ 1,000	\$ 14,000	\$ 81,400	\$ 68,100
2023	37	\$ 56,850	\$ 74,500	\$ 6,500	\$ 0	\$ 81,400	\$ 81,000
2024	39	\$ 64,800	\$ 66,500	\$ 6,500	TBD	\$ 81,400	\$73,000 (pending)

- 2024 subsidies already approved by Steering Committee → early disbursement of funds
- Chapters get funds much faster if using Concentration Banking account
- Budget currently supports
 - Chapter subsidies (including seed subsidy for new chapters)
 - Chapter awards
 - Pre-university and university outreach (if remaining funds are available)
- Chapters budget in 2025 will increase by \$10.1k to \$98.0k



New Subsidy Criteria for 2025

Goal: reward chapters with most active and consistent activity levels

Tiered Criteria	SSCS-only Chapter	Joint Chapter
At least 2 technical events in past calendar year (basic requirement for active chapter) or at Steering Committee's discretion for chapters reactivating activities	\$1,000	\$500
At least 4 qualifying events in past calendar year	+ \$500	+ \$250
At least 4 qualifying events per year in each of past 2 calendar years	+ \$500	+ \$250
Additional subsidy at Steering Committee's discretion	Up to + \$1,000 (subject to budget availability)	Up to + \$500 (subject to budget availability)
New chapter	\$2,000 (prorated to \$1,000 after June)	\$1,000 (prorated to \$500 after June)

- One photo of event (e.g., speaker, attendees, sign-up sheet, or event announcement) must be submitted into vtools as evidence of event
- Events with multiples speakers/sessions should have each speaker/session count as one event
- Qualifying events: Technical, Professional (e.g., Senior Membership drive), Pre-U STEM Program, Nontechnical (e.g., Social), Humanitarian (e.g., Local Disaster Relief)
- Only events submitted into vtools by December 15, 2024 will count



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New Initiative for Student Chapters – SSCS Tutoring

- **Vision: SSCS in every circuits class**
- Initiated by Ken O, SSCS Past President – contact Ken for more details
- Recruit undergrad and grad student volunteers through IEEE and SSCS Student Chapters or other means to enhance the learning experience in basic electric and transistor circuits classes
- **Reward volunteers with IEEE and SSCS membership, and provide videos, shirts and other items with SSCS logos**
- "When I had undergraduate tutors who have taken classes from me, my students have had better learning experiences. **My teaching evaluation was higher.**"
- Rewards based on tiers of volunteering hours – what do students want? IEEE and SSCS Membership (5 hours), Q&A with their favorite SSCS celebrity, SSCS website recognition based on hours of volunteering, Attendance to Circuits Insight.
- Pilot locations: UT Dallas, South Brazil, UC San Diego, Africa?
- Professors and Student chapter leaders: need your help!

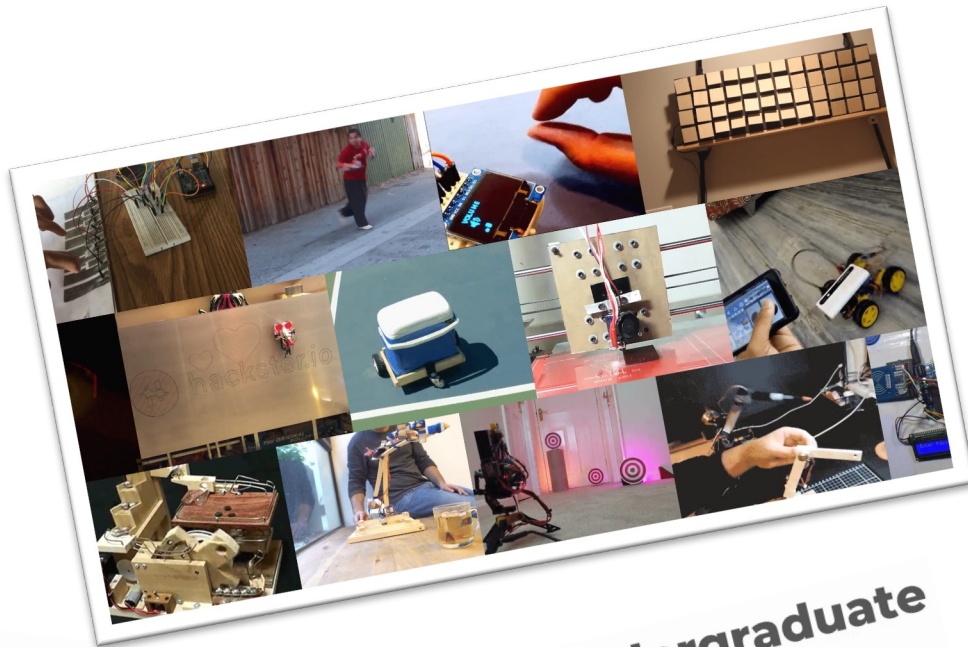
SSCS Arduino Contest

Jeremy Cosson-Martin & Ali Sheikholeslami
February 20, 2024



SSCS Arduino Contest: Overview

(<https://www.sscs-arduino-contest.com>)



How it works:

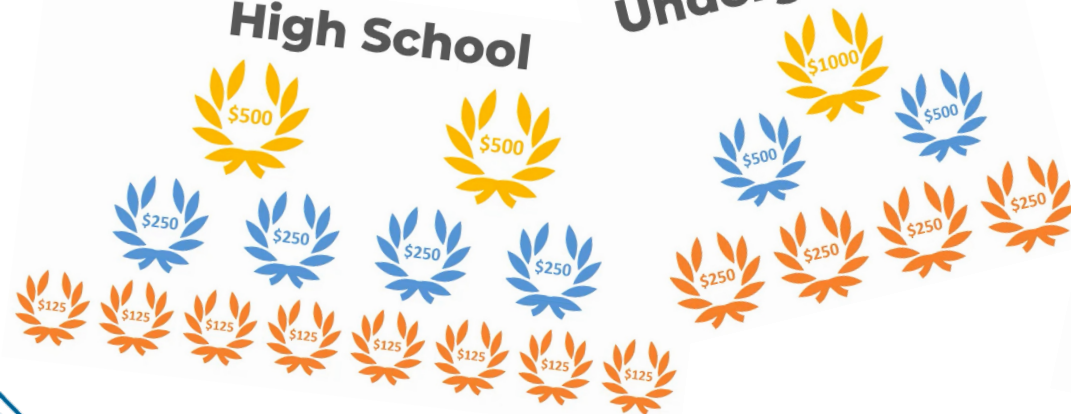
1. Join it
2. Get it
3. Learn it
4. Think it
5. Build it
6. Show it
7. Win it!

- ▶ A fully remote competition encouraging high school and undergraduate students to explore the world of electronics!
- ▶ Students build an Arduino project based on a theme and submit a 3-minute video for the chance to win HUGE cash prizes!

High School

Undergraduate

High School Teachers



- ▶ Our mission: to enable students from all backgrounds to explore and fall in love with electronics! And to introduce them to our society!

SSCS Arduino Contest: This Year

(<https://www.sscs-arduino-contest.com>)

This Season's Theme: **Solutions to Climate Change**

Build us an Arduino project
to help fight climate change!



This year's objectives:

- ▶ Expand the competition worldwide:
 - Open the competition to every students (excluding US embargoed countries).
- ▶ Increase submissions:
 - Reduce barriers.
 - Promote financial support.
- ▶ Increase marketing efforts:
 - Recruit volunteers around the world!
 - Promote on social media.

SSCS Arduino Contest: Join Our Team! (<https://www.sscs-arduino-contest.com>)



Organizer:
Jeremy Cosson-Martin



SSCS Vice President of Education
Ali Sheikholeslami



SSCS Executive Director:
Adam Greenberg



SSCS Senior Staff Administrator:
Aisha Gauba VanBuskirk



Student Ambassador:
Irshan Akhtar



Student Ambassador:
Francisca Donoso



Student Ambassador:
Brahim Mezghani



Student Ambassador:
Varun Kakar



Student Ambassador:
Sandra Veljkovic



Student Ambassador:
Jeffrey Wilcox



Student Ambassador:
Elizabeth Polito



Student Ambassador:
Rahul Sharma



Student Ambassador:
Faraz Imran



Student Ambassador:
Muhammad Hunain Memon



Student Ambassador:
Laura Ocampo Cortez



Student Ambassador:
Danijel Dankovic

- ▶ Our volunteer team is growing by the day, but we still need your help!
- ▶ Volunteer responsibilities:
 1. Market the competition in your local region.
 2. Help rank submission videos.
 3. Suggest ways to improve the competition!

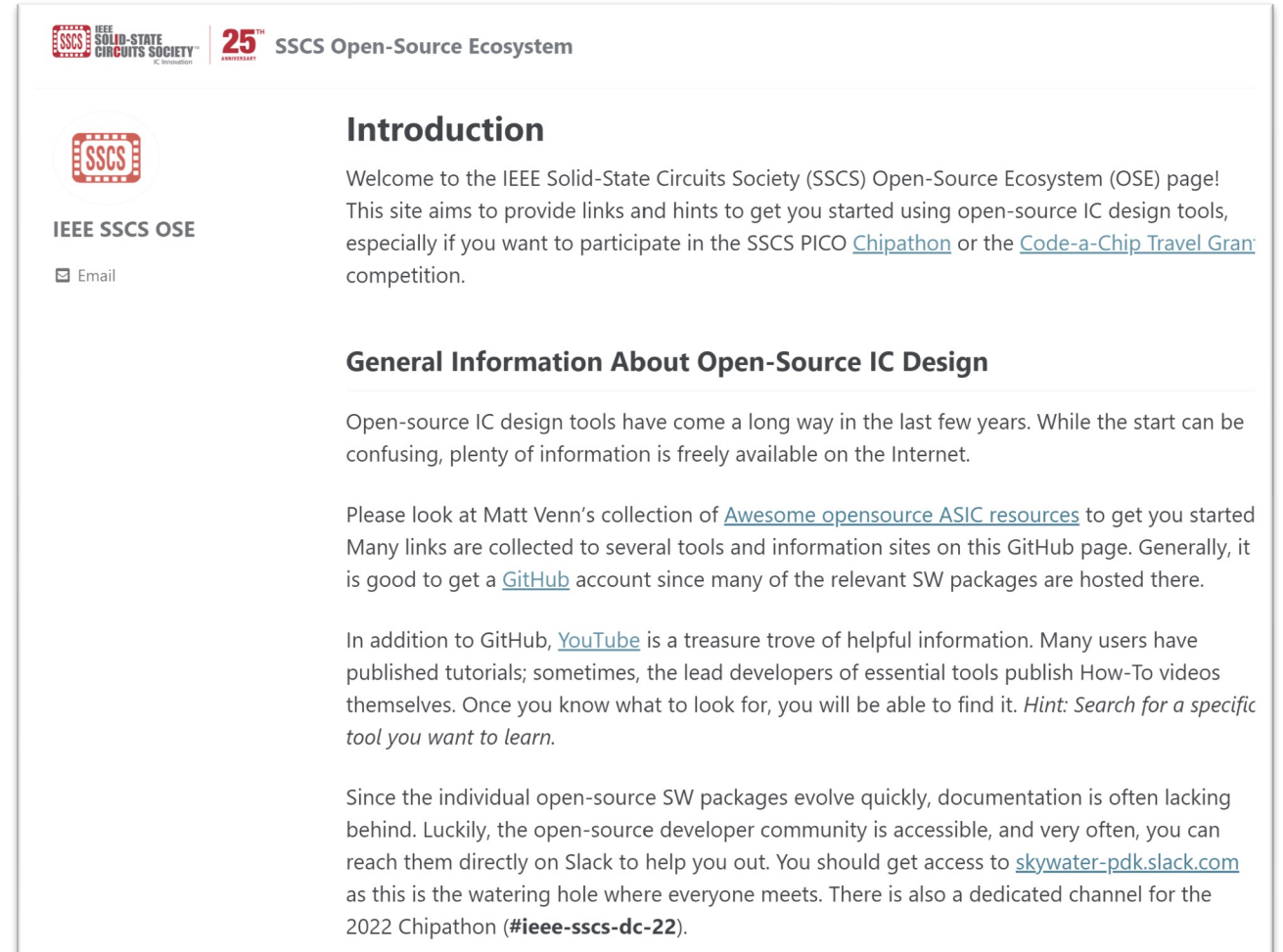
SSCS TC Open-Source Ecosystem - PICO Program Overview -

Boris Murmann & Mehdi Saligane
February 20, 2024




TC-OSE Charter


- ▶ Organize outreach events
 - Chipathon competition
 - Code-a-chip travel grants
- ▶ Develop strategy for open-source publication venues
- ▶ Contributions to tool infrastructure, links to education materials
 - <https://sscs-ose.github.io/>
- ▶ External engagements
 - E.g., CASS, CHIPS Alliance, ...
- ▶ **Engagement with SSCS chapters**



The screenshot shows the IEEE Solid-State Circuits Society (SSCS) Open-Source Ecosystem (OSE) page. At the top, there are logos for SSCS and the 25th Anniversary. The main content includes an introduction, general information about open-source IC design, and a list of resources. The introduction welcomes visitors and mentions the Chipathon and Code-a-Chip Travel Grant competitions. The general information section discusses the availability of open-source IC design tools and provides links to resources like 'Awesome opensource ASIC resources' and 'skywater-pdk.slack.com'.

IEEE SOLID-STATE CIRCUITS SOCIETY
25TH ANNIVERSARY SSCS Open-Source Ecosystem

 **IEEE SSCS OSE**

 Email

Introduction

Welcome to the IEEE Solid-State Circuits Society (SSCS) Open-Source Ecosystem (OSE) page! This site aims to provide links and hints to get you started using open-source IC design tools, especially if you want to participate in the SSCS PICO [Chipathon](#) or the [Code-a-Chip Travel Grant](#) competition.

General Information About Open-Source IC Design

Open-source IC design tools have come a long way in the last few years. While the start can be confusing, plenty of information is freely available on the Internet.

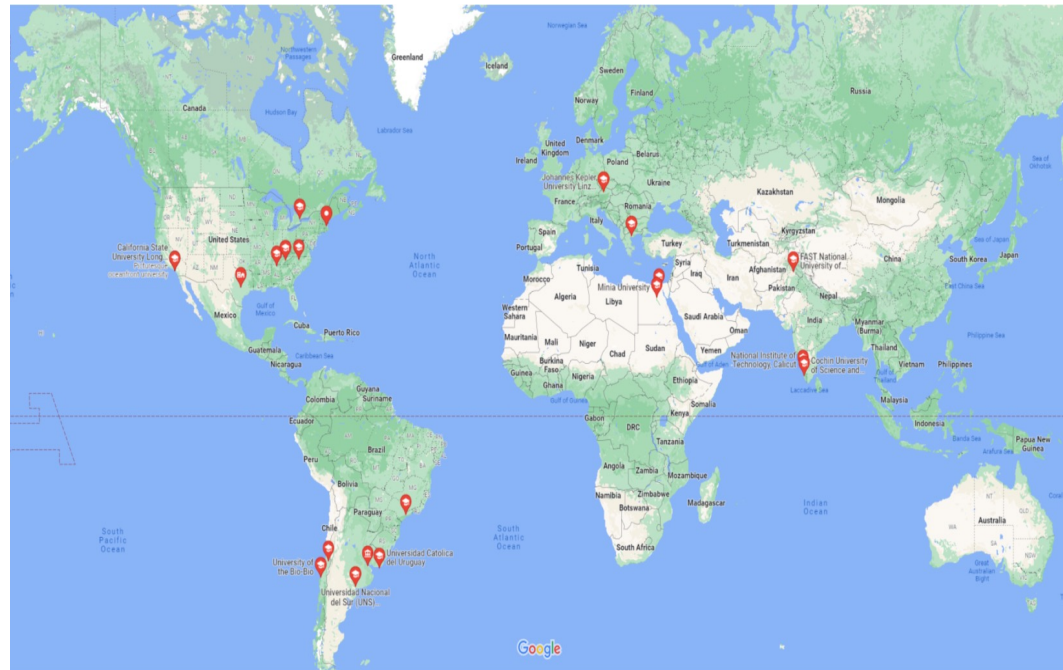
Please look at Matt Venn's collection of [Awesome opensource ASIC resources](#) to get you started. Many links are collected to several tools and information sites on this GitHub page. Generally, it is good to get a [GitHub](#) account since many of the relevant SW packages are hosted there.

In addition to GitHub, [YouTube](#) is a treasure trove of helpful information. Many users have published tutorials; sometimes, the lead developers of essential tools publish How-To videos themselves. Once you know what to look for, you will be able to find it. *Hint: Search for a specific tool you want to learn.*

Since the individual open-source SW packages evolve quickly, documentation is often lacking behind. Luckily, the open-source developer community is accessible, and very often, you can reach them directly on Slack to help you out. You should get access to [skywater-pdk.slack.com](#) as this is the watering hole where everyone meets. There is also a dedicated channel for the 2022 Chipathon ([#ieee-sscs-dc-22](#)).

SSCS "PICO" Chipathon

- ▶ 2021: 61 submissions, 18 selected (11 taped out)
- ▶ 2022: 54 submissions, 22 selected (14 taped out)



2022 selected teams from 10 countries, 5 continents



IEEE SOLID-STATE CIRCUITS SOCIETY™
IC Innovation

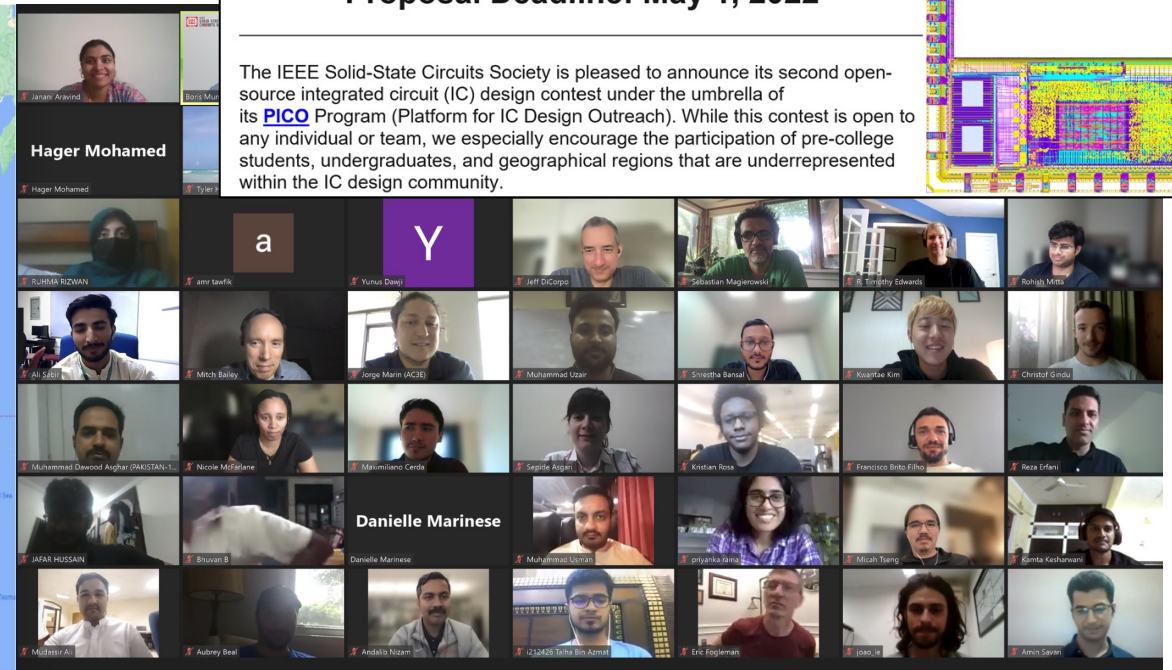
2022 SSCS "PICO" Open-Source Chipathon

Proposal Deadline: May 1, 2022

Your Design Goes Here!

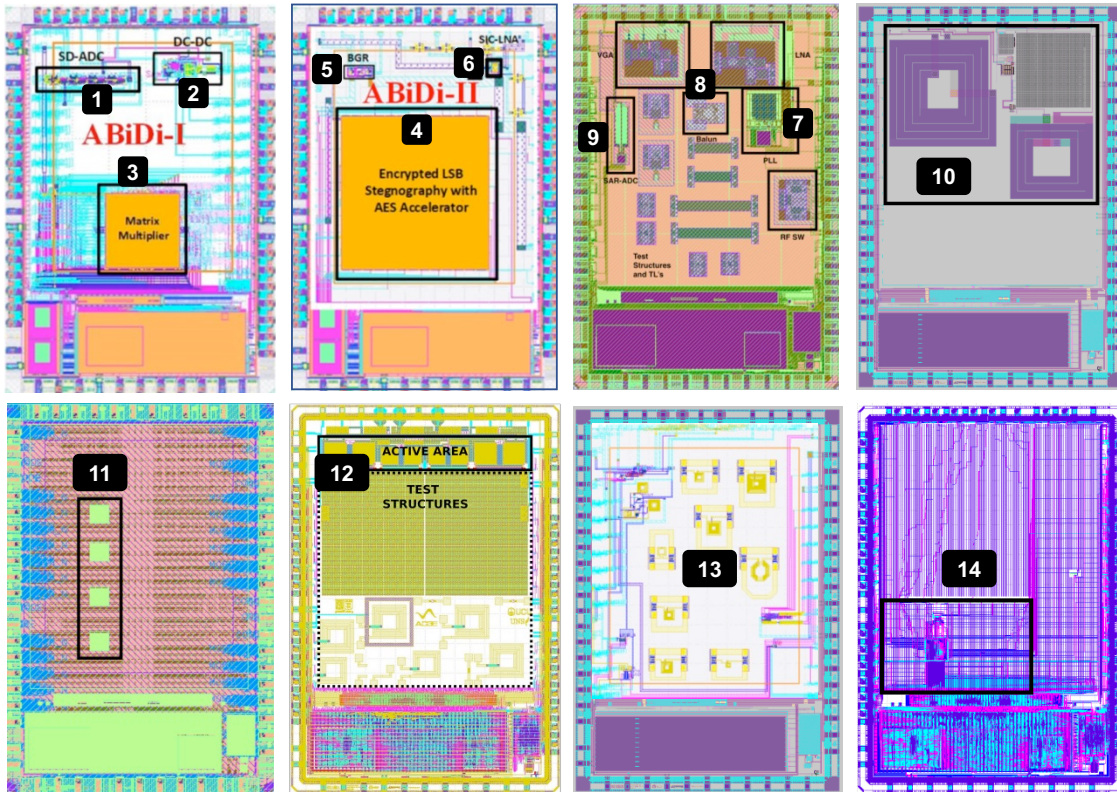


The IEEE Solid-State Circuits Society is pleased to announce its second open-source integrated circuit (IC) design contest under the umbrella of its **PICO** Program (Platform for IC Design Outreach). While this contest is open to any individual or team, we especially encourage the participation of pre-college students, undergraduates, and geographical regions that are underrepresented within the IC design community.



June 22, 2022, kick-off meetup with over 100 attendees

Designs Taped Out in 2022

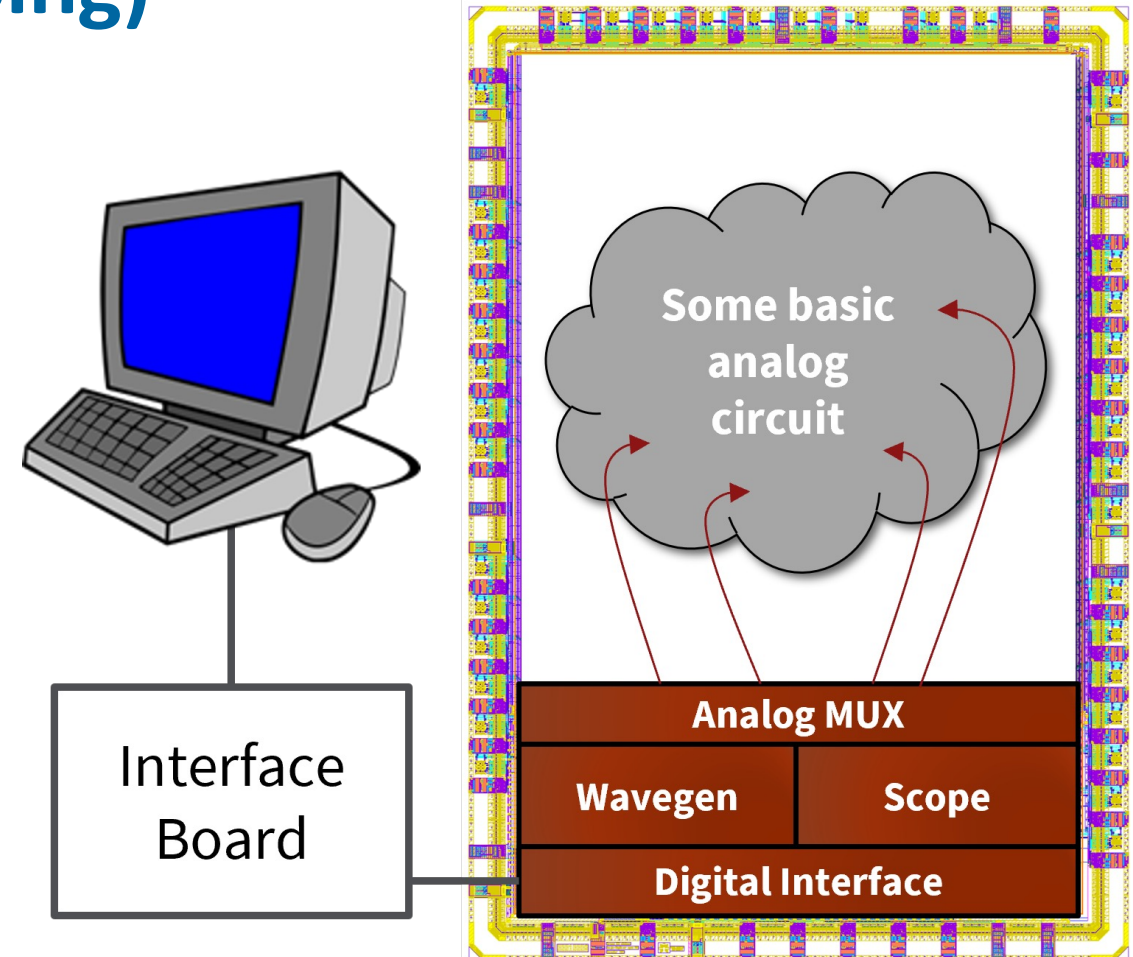


\$10k per chip via Efabless Chiplgnite

	Function	Team	Chip URL
1	Spatial Sigma-Delta ADC	Pakistan1 (FAST National University)	https://platform.efabless.com/projects/1486
2	On-Chip DCDC Converter with Fast Transient Response	Pakistan4 (FAST National University)	
3	Matrix Multiplier for AI at the Edge	Pakistan7 (FAST National University)	https://platform.efabless.com/projects/1443
4	Encrypted LSB Steganography with AES Accelerator	Pakistan2 (FAST National University)	
5	CMOS Bandgap Reference	Pakistan3 (FAST National University)	https://platform.efabless.com/projects/1431
6	Self-Interference Cancellation LNA	Pakistan4 (FAST National University)	
7	Sub-Sampling PLL for SerDes Applications	Austria (Johannes Kepler Univ., Linz)	https://platform.efabless.com/projects/1457
8	60 GHz Demonstrator Chip	Brazil (University of São Paulo)	
9	Low-Power 10-bit SAR ADC	USA1 (University of Alabama & MIT Lincoln Lab)	https://platform.efabless.com/projects/1593
10	Boost Converter for Battery-Powered IoT Applications	Greece (Aristotle University of Thessaloniki)	
11	Radiation-Hardened ALU	USA2 (North Carolina A&T State University)	https://platform.efabless.com/projects/1427
12	DC-DC Buck Converter for CubeSat	Chile ¹ /Argentina ² /Uruguay ³ ¹ Universidad Técnica Fed. Santa María ² Universidad Nacional del Sur & Instituto Nacional de Tecnología Industrial ³ Universidad Católica	
13	Electrochemical Water Quality Monitoring	USA5 (University of Tennessee)	https://platform.efabless.com/projects/1469
14	Mix-Pix - A Mixed-Signal Circuit for Smart Imaging	Chile (Universidad del Bío-Bío)	https://platform.efabless.com/projects/1494

2023 Chipathon Project (Ongoing)

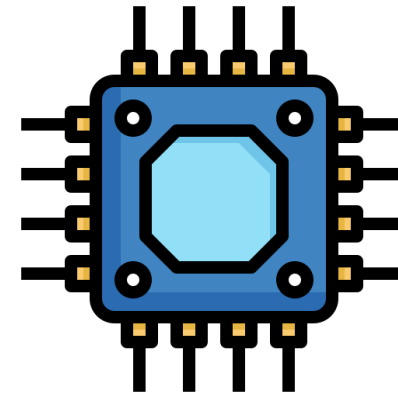
- ▶ **Build open-source on-chip waveform generator and oscilloscope macros**
 - Collection of generally useful IP blocks
- ▶ Enable testing of low frequency analog circuits using only a PC
- ▶ Tape out first prototypes and improve with community over time
- ▶ Silicon donation from GF
- ▶ Schedule
 - Info session: March 9, 2023
 - Proposal deadline (notebook): May 8, 2023
 - Announcement of teams: June 2, 2023
 - Start of online meetups: June 2023
 - Tapeout deadline: ~~December 2023~~ May 2024



Call for Participation SSCS PICO “Code-a-Chip” Travel Grant Competition



IEEE
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CIRCUITS SOCIETY™**
IC Innovation



Get OpenLane

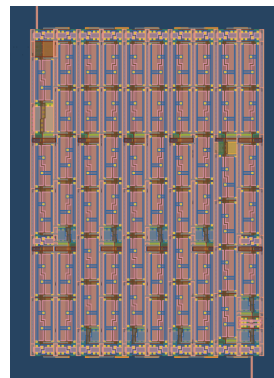
```
$ git clone --depth=1 https://github.com/The-OpenROAD-Project/OpenLane
```

Write verilog

```
%%writefile inverter.v  
module inverter(input  
    assign out = !in;  
endmodule
```

Run OpenLane Flow

```
import os  
import pathlib  
OPENLANE_ROOT=str(pathlib.Path('OpenLane').resolve())  
PATH=os.environ['PATH']  
%env PDK_ROOT={CONDA_PREFIX}/share/pdk  
%env TCLLIBPATH={CONDA_PREFIX}/lib/tcllib1.20  
%env OPENLANE_ROOT={OPENLANE_ROOT}  
%env PATH={PATH}:{OPENLANE_ROOT}:{OPENLANE_ROOT}/scripts  
%env OPENLANE_LOCAL_INSTALL=1  
!flow.tcl -design .
```



**Describe your chip design in
Python and win a travel grant to the
2024 VLSI Symposium in Hawaii!**

<https://github.com/sscs-ose/sscs-ose-code-a-chip.github.io>

Info session: February 21, 2024

Submission deadline: April 3, 2024

Looking for Volunteers!

- ▶ Possible tasks
 - Evaluate submissions and milestone reports
 - Attend weekly online meet-ups (~June-November)
 - Give a short “how to” presentation during online meetup
 - Provide technical guidance during meet-ups and via Chipathon Slack channel
 - Prepare online tutorials, webinars, chapter talks
 - Help with open-source tool & utility development
- ▶ Minimum time commitment of 1-2 hours per week
- ▶ Sign up at <https://sscs.ieee.org/volunteer-opportunities#SSCD>



SSCS Women-in-Circuits Overview

Zeynep Toprak Deniz & Farhana Sheikh
February 20, 2024



- Sub-Committee under SSCS Membership
- SSCS membership support and programs to increase diverse representation in academia and semiconductor industry
 - Establish statistics-driven programs
 - Member elevation
- Professional Development Programs
 - Career webinars
- SSCS mentoring targeting undergraduate, grad students and YPs
- Student Travel Grants
 - Grad and undergrad

Goal: Inspire – Retain – Elevate

Organization	% Women
IEEE	17.2% ↑
EDS	15.6% ↑
SSCS	8.2% ↑
CAS	14.8% ↑

SSCS Governance	% Women
Exec Com (+ VP's)	1 / 9 (11%)
Ad Com (incl. M-A-L)	11 / 39 (28%)

SSCS Member Elevation	Women / Total (% Women)
SSCS Senior Members (2023)	118 / 1,924 (6.1%) ↑
SSCS Fellows	11 / 448 (2.5%)
New SSCS Fellows (2023)	1 / 15 (6.7%) ↓

WIC Target Set in 2022: 30% by 2030

Healthy pipeline:
WIC has active role in nominations

Awards (overall)	Women / Total (% Women)
Pederson Award	2 / 41 (4.9%) ↓
Society Awards	0 / 9 (0%) ↓
JSSC Best Paper	11 / 230 (4.8%) ↓
Distinguished Lecturer	13 / 141 (9.2%) ↑
Pre-doctoral (2022)	3 / 26 (11.5%) ↓

Publications	Women / Total (% Women)
Editor-in-Chief	0 / 5 (0%)
JSSC AE 2024	2/23 (8%) ↑
JSSC AE 2023	1/19 (5%)
JSSC AE avg 2013-2024	2/36 (6.2%)
JSSC AE unique 2013-2023	9/161 (5.6%)

- Median for women representation across the total semiconductor workforce has increased to **20-29%**. [1]
- Median for technical women representation is only **10-19%** (up from 10-15%)
- Representation falls to **<10%** in senior roles. [1]
 - **SSCS female representation is catching up with global representation**

[1] Ref: "GSA Brief: Women in the Semiconductor Industry", Global Semiconductor Alliance and Accenture, 2023.
<https://www.gsaglobal.org/wp-content/uploads/2024/02/2023-ACN-GSA-Survey-Results-Presentation-BRIEF-2.pdf>, accessed Jan 15, 2024

ISSCC2023

Are you new to networking & want to get a head start?
Does networking feel like a puzzle to solve?
Join us for a Networking Bingo at ISSCC 2023!
A peer-to-peer networking event aimed to help connect emerging engineers and

Networking - a Puzzle. Not Anymore!

A	D	V	O	C	A	C	I	B												
			O	M																

Moderator
Maryam Rofougaran
Movandi

Speakers

 Hua Wang ETH Zurich Wireless	 Kyeongha Kwon KAIST Wireline	 Asako Toda Intel Chip-to-Chip	 Angad Rekhi NVIDIA Optical
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CICC2023 Panel: How to strive and maintain passion over a long career life?



Linda Katehi,
TAMU



Ken O,
UT Dallas



Farhana Sheikh,
Intel



Tyson Tuttle,
Silicon Labs

VLSI2023: Diversity Panel and Luncheon



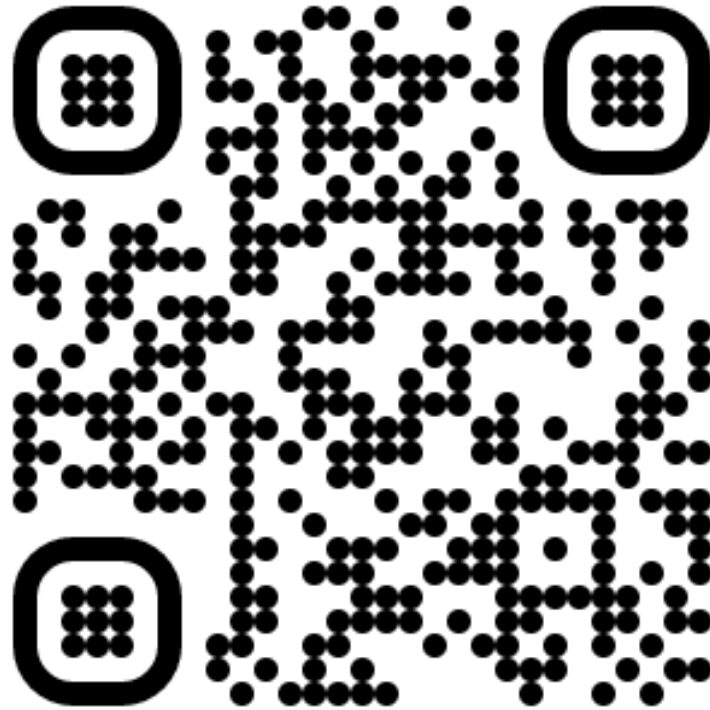
- 2023 ISSCC Panel: Integrated Circuits in An Interconnected World
 - Bingo Networking
- 2023 CICC Panel and WiC-YP joint mentoring
- 2023 VLSI diversity luncheon, and YP-WiC-WiEDS joint mentoring diner
- 2023 ESSERC WiC + YP+ EDS mentoring event
- 2023 A-SSCS LEAP and WiC+YP joint mentoring event

- ISSCC
 - 2024 Rising Stars
 - Bingo Networking
 - WiC + YP Mentoring @ Tuesday 20th 6pm – 7pm SoMA Room
- Professional development Seminar
 - April 2024
 - To Ph.d. Or Not To Ph.d. – That Is The Question
- CICC – preparations underway
 - Distinguish Speaker: Gozde Fidan Sr. Director of Engineering @Silicon Labs
 - WiC + YP mentoring / networking
- VLSI @ Hawaii
 - Half day workshop or WiC Luncheon: TBD
 - WiC + YP mentoring / networking
- ESSCERC
 - Special Security Workshop with Ingrid Verbauwhede (Pedersen Award to fund the WS)
 - WiC + YP + EDS mentoring / networking
 - Possible Bingo networking event
- A-SSCS (20th anniversary)
 - LEAP: more diverse speakers
 - WiC + YP mentoring / networking

We need volunteers to lead these events!

Please Volunteer!

Sign up for SSCS Membership Today!
Sign up for WiC today!



Agenda

Time	Item	Presenter
12:00-12:10	Opening Remarks	Bill Bowhill, Makoto Ikeda
12:10-12:20	Chapter Awards	Bill Bowhill
12:20-12:50	Chapters Updates	Alvin Loke
12:50-13:10	SSCS Initiatives for Chapters Engagement	Jeremy Cosson-Martin, Mehdi Saligane, Zeynep Toprak Deniz (Farhana Sheikh)
13:10-13:20	Group Discussion / Q&A	All
13:20-13:30	Group Photo	All

Group Photo Time

