

DAC-2025 Birds-of-a-Feather

Open-Source EDA, Data and Collaboration

June 24, 6:30-9:30pm, Room 3001



Agenda



Interest Form

Welcome !

- 6th in this Birds-of-a-Feather series, 2018-
 - “Open-source EDA, Data and Collaboration”
- Purpose: **updates** and **invitations**
- A great agenda !
 - I. Opening
 - II. Open-Source EDA: Worldwide Efforts
 - III. Machine Learning and Data
 - IV. Advanced Packaging, Heterogeneous Integration
 - V. Updates from the Community
 - VI. Education and Workforce Development
 - VII. Lightning Round / Late Contributions

Thanks to You, the OS EDA Community !!!

• **Speakers**

- Contributions shared from around the world, across industry and academia
- Accomodating the time limits
- See the webpage for extended slides, videos

• **Organization and Support**

- Ethan Mahintorabi, Google
- Tom Spyrou, Precision Innovations
- Rob Mains, CHIPS Alliance
- Mohamed Kassem, ChipFoundry
- Zhiang Wang, UC San Diego

• **Let's stay in touch !**

- Signup sheets are circulating
- Discussions++ afterward



Tuesday, June 24, 2025
6:30pm-9:30pm, Moscone
West, Room 3001

Open Source EDA
Birds of a Feather
DAC 2025

On to the Agenda !

Session I: Opening [6:30PM - 6:40PM]

1. Welcome and Introduction, Andrew Kahng, UCSD

Session II: Open-Source EDA: Worldwide Efforts [6:40 PM - 7:10 PM]

2. "Recent Open Source Activities in Germany / Europe", Ulf Schlichtmann, Technical University of Munich
3. "AiEDA: An Open-Source AI-Aided Design Library for Design-to-Vector", Xingquan Li, Pengcheng Laboratory
4. "Update on OpenROAD and The OpenROAD Initiative", Tom Spyrou, Precision Innovations

Session III. Machine Learning and Data [7:10 PM - 7:30 PM]

5. "Standardizing Data Formats for Open-Source Model Sharing and Benchmarking", Ioannis Savidis, Drexel
6. "Review of Open Source and Data Developments: Infrastructure and LLMs", Vidya Chhabria, ASU

Session IV. Advanced Packaging and Heterogeneous Integration [7:30 PM - 8:00 PM]

7. "Open Tools for Advanced Packaging STCO", Zhichao Chen, UCLA
8. "Open3DBench: Open-Source 3D-IC Backend Implementation and Benchmark Built upon OpenROAD", Yunqi Shi, Nanjing University
9. "Revolutionize 3D Chip Design with Open3DFlow, An Open-source AI-enhanced Solution", Lei Ren, Tsinghua University

Break [8:00 PM - 8:15 PM]

Session V: Updates from Community [8:15 PM - 8:45 PM]

10. "Recent Updates in and around Verilator for Architectural Exploration, Testing, Verification and Coverage Reporting", Michael Gelda, Antmicro
11. "Lessons Learned Implementing an FPGA in 12nm using OpenROAD", Peter Gadfort, Zero ASIC
12. "GPU Accelerated, Open-source Timer and Logic Simulation Efforts", Yi-Chen Lu / Yanqing Zhang, NVIDIA

Session VI: Education and Workforce Development [8:45 PM - 9:15 PM]

13. "Open Source Hardware at ETH Zurich Supporting Education and Research", Marco Bertuletti, ETH Zürich
14. "Recent Experiences with OpenROAD- and IHP130/Croc-based Courses", Davit Markarian, UCSD
15. "Rescuing the SKY130 MPW Program" (short), David Junkin, Cadence
16. "Optimize RISC-V Processors with iEDA in "One Student One Chip" Initiative", Zihao Yu, Institute of Computing Technology, Chinese Academy of Sciences

Session VII: Lightning Round (Late Contributions) and Discussions [9:15 PM - 9:30 PM]

- SODA and DeCoDe (Ankur Limaye, PNNL)
- Vaporview - an open source waveform Viewer for VScode (Lloyd Ramseyer, Cognichip)
- Yosys-slang (Akash Levy, Silimate)
- GDSFactory (Joaquin Matres, GDSFactory)
- YorChip (Kash Johal, YorChip)
- It Takes a Community! (Mohamed Kassem, ChipFoundry)