

WELCOME!

Fernando Ramos (IST, University of Lisbon)



BIG THANK YOU to P4 Community Members





































BIG THANK YOU to my "co-chair"!



Andy Fingerhut
Principal Engineer, Cisco Systems





BIG THANK YOU to the AMAZING Support From:



Denise BartonStratiView



Michelle Roth
Linux Foundation





BIG THANK YOU to our WONDERFUL Program Committee!



Amedeo Sapio, NVIDIA

Andy Fingerhut, Cisco

Ben Pfaff, Feldera

Chris Sommers, KeySight

Gianni Antichi, Politecnico di Milano & QMUL

Jonathan DiLorenzo, Google

Mario Baldi, NVIDIA

Muhammad Shahbaz, University of Michigan

Vladimir Gurevich, P4ica





Agenda

12:00 pm	Welcome	Fernando Ramos, General Chair 2025 P4 Workshop
12:05 pm	Keynote - High-Level and Target-Agnostic Transport Programs	Mina Tahmasbi Arashloo, University of Waterloo
12:40 pm	DVaaS Detective: The Case of the Failing Tests	Victor Rios, Google
1:05 pm	Cisco Silicon One: Unifying Network Forwarding with P4 Program	Anand Sridharan, Cisco Systems
1:25 pm	BREAK	
1:35 pm	Unifying P4 with eBPF and DPDK via XDP2	Tom Herbert, XDPnet
2:00 pm	New Dawn of P4	Debashis Chatterjee, Intel
2:25 pm	XASM: A Foundation to Program the X2 with P4	Fabian Ruffy and Vladimir Gurevich, XSight Labs
2:50 pm	Keynote - Using P4 NICs for Resilient Scale-out GPU Interconnect	Krishna Doddapaneni, AMD
3:25 pm	P4 Workshop Wrap-up	Andy Fingerhut, Cisco Systems





What the P4 Workshop 2025 Reveals About the Role of P4 Today

- P4 is moving upward from packet to transport programmability
 - o Growing relevance for Al-driven and RDMA-style transports, calling for richer abstractions
- P4 as an **enabler for Al-centric**, high-performance systems
 - o Helping hardware and software convergence: NICs, GPUs, switches
- P4 as a unifying layer across the networking ecosystem
 - Integration with eBPF, DPDK, and emerging toolchains
- Vibrant ecosystem of research, startups, and labs
 - Collaboration expanding beyond academia into deployment reality





How to Participate in P4 Community

P4 activities are generally **open for anyone** to participate

- Technical discussions and contributions
 - Working Groups Language Design, API, Architecture, Education
 - Monthly TST meetings
- Education
 - P4 Developer Days community educational webinars
 - P4 Workshop (this event!)
 - P4 Publications (on P4 website)
- Stay informed
 - P4 newsletter
 - Working Group news
 - Social media LinkedIn, Twitter





P4 Workshop & Demo

- If you miss attending part of this event, the video and slides will be posted on the <u>P4.org</u> website soon!
- Additional pre-recorded P4 Workshop talks are available now on the P4 website - check them out!
- Check out the demo in the P4 booth:

"Gigaflow: Pipeline-Aware Caching in Virtual Switches with P4"

- October 14: 11am noon
- October 15: 2:00 3:00pm
- October 16: 11am noon







2025 Distinguished Contributor Award

