

Smarter Skies, More Resilient Systems: The Future of Commercial Aviation

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Yiran Chen earned his B.S. in 1998 and M.S. in 2001 from Tsinghua University and completed his Ph.D. in 2005 at Purdue University. In 2010, he joined the University of Pittsburgh as an Assistant Professor, where he was later promoted to Associate Professor with tenure in 2014, holding the prestigious Bicentennial Alumni Faculty Fellowship.

Dr. Chen is the Director of the National Science Foundation (NSF) AI Institute for Edge Computing Leveraging (Athena), one of the 27 National AI Institutes in the United States. He also leads the NSF Industry-University Cooperative Research Center (IUCRC) for Alternative Sustainable and Intelligent Computing (ASIC) and co-directs the Duke Center for Computational Evolutionary Intelligence (DCEI).

Dr. Chen has an extensive publication record, including one book, over 700 technical papers, and 96 U.S. patents. His work has earned 15 paper awards, including two Test-of-Time Awards, and 17 best paper nominations from leading international journals and conferences. Among his numerous accolades, he is one of only three individuals to receive Technical Achievement Awards from both the IEEE Circuits and Systems Society and the IEEE Computer Society, organizations with histories spanning 76 and 79 years, respectively.

He has served as a Distinguished Lecturer for the IEEE Council on Electronic Design Automation (CEDA) and the IEEE Circuits and Systems Society (CASS), as well as a Distinguished Visitor of the IEEE Computer Society (CS). He is a Fellow of the AAAS, ACM, IEEE, and NAI, and a member of the European Academy of Sciences and Arts. From 2021 to 2024, he chaired the ACM Special Interest Group on Design Automation (SIGDA), and was Editor-in-Chief of the IEEE Circuits and Systems Magazine from 2020 to 2023. Currently, he is the inaugural Editor-in-Chief of the IEEE Transactions on Circuits and Systems for Artificial Intelligence (TCASAI) and the inaugural Chair of the IEEE Circuits and Systems Society Machine Learning Circuits and Systems (MLCAS) Technical Committee.

Beyond academia, Dr. Chen has contributed to industry as Chairman of the Board, Independent Director, and consultant for several startups and venture capital firms. He is a passionate advocate for the responsible use of AI technologies. Dr. Chen is a founding member of the steering committee for the Academic Alliance on AI Policy (AAAIP) and a Fellow of the Asian American Scholar Forum (AASF).



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