Stanford

Vinay Chenna

Postdoctoral Scholar, Electrical Engineering

Bio

BIO

Vinay Chenna is an incoming tenure-track assistant professor at Columbia University. He received a B.Tech in electrical engineering from the Indian Institute of Technology (IIT) Madras, Chennai, India, in 2019, and a Ph.D. in electrical engineering from the Ming Hsieh Department of Electrical and Computer Engineering at the University of Southern California, Los Angeles, CA, USA, in 2026. His current research focuses on leveraging computational techniques and optimization algorithms to design high-performance RF and mm-Wave integrated circuits. He was a recipient of the USC ECE Ming-Hsieh Institute (MHI) PhD Scholarship in 2026-27 (voluntarily declined), USC Annenberg Fellowship in 2019, and the USC IUSSTF-Viterbi summer research award in 2018. He has won the Best Student Paper Award - 1st Place at the IEEE Radio Frequency Integrated Circuits (RFIC) Symposium in 2025, the IEEE Solid-State Circuits Society (SSCS) Predoctoral Achievement Award in 2025-26, and the IEEE Microwave Theory and Techniques Society (MTT-S) Tom Brazil Graduate Fellowship in 2026. He currently serves as a reviewer for several IEEE journals, magazines, and conferences within the IEEE SSCS, APS, CAS, and MTT-S societies.

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- Constantine Sideris, Postdoctoral Faculty Sponsor

LINKS

- Personal website: https://www.vinaychenna.com/home
- Columbia EE faculty profile: https://www.ee.columbia.edu/content/vinay-chenna

Publications

PUBLICATIONS

- **High-performance tunnel-junction selectors with graded tunnel barriers based on five-layer van der Waals heterostructures** *NATURE ELECTRONICS*
  Liu, H., Liao, H., Li, M., Yang, N., Hsu, T., Zhao, R., Xu, Y., Kim, S., Ni, Y., Chenna, V., Mahalingam, K., Bowers, C., Ganguli, et al
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- **Rapid Full-Wave Training-Data Synthesis for Deep-Learning Surrogates** *IEEE MICROWAVE AND WIRELESS TECHNOLOGY LETTERS*
  Chenna, V., Ho, J., Sun, J., Sideris, C.
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