Second-Year Ph.D. Candidate, School of Computer and Communication Sciences, EPFL Z

Research Interests

Information and coding theory and applied probability, particularly in communication systems

Education

EPFL, Ph.D. in Computer and Communication Sciences

Advisor: Prof. Emre Telatar; CGPA: 6.0/6.0

Lausanne, Switzerland Sep. 2022 – Present

Indian Institute of Technology Bombay, B.Tech. in Electrical Engineering

With Honors in Electrical Engineering and Minor in Mathematics; CGPA: 9.60/10

Mumbai, India Jul. 2018 – May 2022

Publications

Conference papers:

- [C3] F. Z. Faizal, A. G., et al., "ICQ: A quantization scheme for best-arm identification over bit-constrained channels," in International Symposium on Modeling and Optimization in Mobile, Ad hoc, and Wireless Network (WiOpt), 2023
- [C2] S. Sharma, A. G., et al., "Micro-Doppler parameter estimation using variational mode decomposition with finite rate of innovation," in *IEEE International Conference on Signal Processing and Communications (SPCOM)*, 2022
- [C1] S. Sharma, A. G., et al., "Theoretical analysis of an inverse Radon transform based multicomponent micro-Doppler parameter estimation algorithm," in *National Conference on Communications (NCC)*, 2022

Academic Achievements

• Grade 6.0 (exceptional performance, over 95%) in all (four) courses taken at EPFL	[2022 – present]
• IITB Institute Academic Prize for being the second-best academic performer in the EE department	[2020-21]
• IITB Undergraduate Research Award (URA01) for work done in Radar Signal Processing	[2020]
• AP grades (top 2%) in Digital Communications, Data Analysis at IITB	[2021, 2019]
• Urvish Medh Memorial Prize for being the highest-ranked student in the EE department at IITB	[2018]
• All-India Ranks of 43 in JEE (Advanced) and 55 in JEE (Main)	[2018]
• Kishore Vaigyanik Protsahan Yojana (KVPY) fellowship from IISc following an All-India Rank of 35	[2016]

Mentoring and Responsibility

• Teaching Assistant for Principles of Digital Communications, Information Theory and Coding at EPFL	[2022-23]
• Teaching Assistant for UG calculus and electromagnetism courses at IITB (4 times)	[2019-22]
• Institute Student Mentor for first-year undergraduates at IITB	[2021-22]
• Mentor for Summer of Science at IITB (signal processing, coding theory, information theory)	[2020, 2022, 2023]
• Class Representative for the B.Tech. in EE batch at IITB	[2018-19]

Extracurriculars

• Intermediate course in Table Tennis under the National Sports Organization at IITB	[2018-19]
est All-Rounder on graduation from Ryan International School Bangalore	[2016]
• Deputy Education Minister in the Student Council at Ryan International School	[2014-15]
• Completed 19 credits in electronic keyboard from the Trinity College of Music London	[2007-13]