

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile:

Dr. Sovanjoyoti Giri received the B. Tech. degree in Electronics and Communication Engineering from Kalyani Government Engineering College (West Bengal University of Technology, Kolkata) in 2012, and the M. Tech. degree in Communication Systems from Motilal Nehru National Institute of Technology Allahabad in 2014. Dr. Giri obtained his doctoral degree from the Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology Kharagpur in December 2022. The title of his Ph.D. thesis was “Feedback-Based Network Coding for Next-Generation Wireless Broadcast”. Dr. Giri has research experience in the areas of network coding and related advanced techniques for the betterment of future wireless communication systems. He used mathematical techniques such as Applied Probability, Stochastic Analysis, Abstract Algebra, Combinatorics, Tensor Analysis etc. to solve problems related to queue occupancy, performance, and QoS in multicast and broadcast systems, and has engineering background encompassing areas like Communication Theory, Wireless Networking, Information Theory, Channel Coding etc. Dr. Giri’s research works were published in reputed journals and conference like IEEE Transactions on Vehicular Technology, IEEE Communications Letters, IEEE Conference on Local Computer Networks etc. He also served as a reviewer for many renowned journals like IEEE Transactions on Vehicular Technology, IEEE Transactions on Services Computing, IEEE Communications Letters, IEEE Systems Journal, IEEE Access etc.

Dr. Giri recently joined the Electronics and Communication Engineering Department at National Institute of Technology Tiruchirappalli as an Assistant Professor in April 2024. Before joining NIT Trichy, he acquired some teaching and research experience while working as an Assistant Professor at the School of Computer Science and Engineering at Vellore Institute of Technology (Chennai Campus), as a Temporary Faculty at National Institute of Technology Sikkim, and as an Assistant Professor at Dehradun Institute of Technology University. Besides academic experience, Dr. Giri has one year of industry experience as a Patent Analyst (after submitting his Ph.D. thesis in September 2021) in Dolcera Information Technology Services Pvt. Ltd. where he analyzed various 4G, 5G and 6G related patents with analysis techniques such as claim charts, novelty search, patent categorization etc.

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1. Name: Dr. Sovanjoyoti Giri
2. Designation: Assistant Professor (Grade-II)
3. Office Address: Room No. 115, Electronics and Communication Engineering Department
4. Telephone (Direct):
Telephone: Not yet assigned
Mobile: 9536899855, 9674042810
5. Email (Primary): sovanjoyoti@nitt.edu
Email (Secondary): sgiri1990@live.com
6. Field(s) of Specialization: Information Theory and Coding, Wireless Communication and Network
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor (Grade-II)	National Institute of Technology Tiruchirappalli	01-04-2024	Till date
Assistant Professor (Senior Grade 1)	Vellore Institute of Technology (Chennai Campus)	29-05-2023	29-03-2024
Temporary Faculty	National Institute of Technology Sikkim	17-04-2023	23-05-2023
Patent Analyst, Electronics and Communication Team	Dolcera Information Technology Services Pvt. Ltd.	18-10-2021	23-09-2022
Assistant Professor	Dehradun Institute of Technology University	14-07-2014	30-06-2015

8. Academic Qualifications (From Highest Degree to High School):

Degree	Board / University	Year	Percentage/ Grade	Subjects
Ph. D.	Indian Institute of Technology Kharagpur	2022	N. A.	Electronics and Electrical Communication Engineering
M. Tech.	Motilal Nehru National Institute of Technology Allahabad	2014	9.63/10	Communication System

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B. Tech.	Kalyani Government Engineering College (West Bengal University of Technology)	2012	8.95/10	Electronics and Communication Engineering
10+2	West Bengal Council of Higher Secondary Education	2008	85.43%	Science
10 th	West Bengal Board of Secondary Education	2006	89.38%	All Subjects

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Member of PhD and MS admission committee for the academic year 2024-25	National Institute of Technology Tiruchirappalli	29-05-2024	Till date
Member of Continuous Assessment Test (CAT) coordination committee for CAT-1 in Winter Semester 2024	Vellore Institute of Technology (Chennai Campus)	10-02-2024	18-02-2024

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
N. A.			

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2008	Award of Excellence for achievement in 12th State Board Examination	State Bank of India
2006 and 2008	Merit Scholarship for achievements in 10th and 12th State Board Examinations (2006 and 2008 respectively)	West Bengal Government

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2015-2020	Ph. D. Fellowship (GATE)	M.H.R.D., Government of India	July 2015	June 2020
2012-2014	P. G. Scholarship (GATE)	M.H.R.D., Government of India	July 2012	June 2014

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13. Details of Academic Work

(i) Curriculum Development: N. A.

(ii) Courses taught at Undergraduate level:

- At NIT Trichy (April 2024–Present): Wireless Communication, Digital Electronics Laboratory.
- At VIT Chennai (May 2023–March 2024): Signals and Systems, Digital Logic and Microprocessor (Theory and Laboratory).
- At NIT Sikkim (April 2023–May 2023): Basic Electronics (Theory and Laboratory).
- At DIT University (July 2014–June 2015): Digital Signal Processing, Information Theory and Coding Techniques, Principle of Communication Systems (Theory and Laboratory), and Microwave Laboratory.

(iii) Project guided at Postgraduate level (one):

- Title of the project: Artificial intelligence techniques for power optimization in wireless sensor networks (WSN)
- Name of the student: Abhishek Kumar (Reg. No: 23MCA1074)
- Department: School of Computer Science and Engineering (SCOPE)
- University: Vellore Institute of Technology (Chennai Campus)

(iv) Other contribution:

Technical Review Experience: Served as a reviewer for the following journals; IEEE Transactions on Vehicular Technology, IEEE Transactions on Services Computing, IEEE Communications Letters, IEEE Systems Journal, IEEE Access, IETE Journal of Research, IETE Technical Review, and Concurrency and Computation: Practice and Experience (Wiley).

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
N. A.				

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
N. A.			

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc.
(mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National / Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
09/05/2024 to 14/05/2024	NEP 2020 Orientation and Sensitization Program	National	Participant	TLC, IIT Madras	TLC, IIT Madras
01/06/2023 to 30/06/2023	Faculty Development Program	Local	Participant	Academic Staff College, VIT Chennai (along with IIT Madras)	VIT Chennai
18/09/2019	Author's workshop on Publishing in Academic Journals	Local	Participant	Taylor and Francis group	IIT Kharagpur
28/05/2017 to 31/05/2017	JTG summer school on signal processing, communications and networks	International	Participant	The Joint Telematics Group and IEEE Information Theory Society	IIT Bombay
01/04/2017	LaTeX workshop on Technical Report Writing	Local	Participant	Student Branch, IEEE Kharagpur section	IIT Kharagpur
20/03/2017 to 26/03/2017	International workshop on Cyber Physical Systems	International	Participant	IIT Kanpur	IIT Kanpur
16/03/2015 to 20/03/2015	Short term course on GSM to 3G through ICT	National	Participant	AICTE	DIT University, Dehradun
21/07/2014	Faculty Development Program	Local	Participant	DIT University, Dehradun	DIT University, Dehradun
08/07/2013 to 13/07/2013	Short term course, WINMAD, on 3G Wireless Networks, MIMO Systems and Antenna Design	National	Participant	MNNIT Allahabad	MNNIT Allahabad
11/06/2013 to 13/07/2013	Summer school on VLSI Design and Embedded Systems	National	Student volunteer	MNNIT Allahabad	MNNIT Allahabad

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21/06/2010 to 20/07/2010	Industrial training program on Embedded System & Robotics	National	Participant	Government College of Engineering and Leather Technology, Kolkata, IIT Bombay and TCS Innovation Lab	GCELT Kolkata
06/03/2009 to 07/03/2009	Workshop on Sustainability of Environment	Local	Participant	Department of Chemistry, Kalyani Government Engineering College	Kalyani Government Engineering College, West Bengal

17. Workshops/ Symposia/ Conferences/ Colloquia/ Seminars Organized (as Chairman/
Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
N. A.				

18. Invited Talks delivered

Topic	Date	Inviting Organization
N. A.		

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Member	IEEE	94801060 (yearly renewal)

20. Academic Foreign Visits

Country	Duration of Visit	Programme
N. A.		

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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Sovanjyoti Giri and Rajarshi Roy	Feedback-Based Network Coding for Broadcast: Queueing Analysis	IEEE Communications Letters	vol. 25, no. 10	pp. 3229-3233	2021	3.553
Sovanjyoti Giri and Rajarshi Roy	Performance Analysis of Feedback-Based Network-Coded Systems for Broadcast	IEEE Transactions on Vehicular Technology	vol. 70, no. 3	pp. 2544-2560	2021	6.239
Sovanjyoti Giri and Rajarshi Roy	On NACK-Based rDWS Algorithm for Network Coded Broadcast	MDPI Entropy	vol. 21, no. 9	p. 905	2019	2.738

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Sovanjyoti Giri and Rajarshi Roy	Packet Dropping and Decoding Statistics for Linear Network Coded Broadcast with Feedback	IEEE 43rd Conference on Local Computer Networks Workshops (LCN Workshops)	pp. 70-77	Conference on Local Computer Networks	Chicago, IL, USA	2018