

Personal Information

Name	Dr. L BHARGAVA KUMAR
Years of Experience	Teaching: 10 Years Research: 13 Years Industry: NIL
Email Id	bhargavakumar.l@bvrithyderabad.edu.in
Areas of Specialization	Wireless Optical Communications, Free Space Optical Communication, Underwater Wireless Optical Communication, Visible Light Communications, Li-Fi, Fading Channels.



Educational Qualifications

Doctoral Degree	Ph.D. (NITK-Surathkal)	ECE – Wireless Optical Communications
PG Degree	M.Tech. (JNTU-Anantapur)	VLSI System Design
UG Degree	B.Tech. (JNTU-Hyderabad)	Electronics and Communication Engineering

Patents: Nil

Papers Published

International Journal Publications

1. **“Reconfigurable Intelligent Surface-assisted Free-space Optical Communication Link for Satellite-Internet of Things (S-IoT)”** - Applied Optics - Prasad Naik R, Goutham Simha GD, L Bhargava Kumar and Prabu Krishnan.
2. **“High-Speed Long Range Multi-hop underwater wireless optical communication convergent with free space optical System for Optical Internet of Underwater Things and Underwater Optical Wireless Sensor Network Applications”** - Optical Engineering 61, no. 7 (2022): 076107 – SPIE – SCIE, Q2, IF – 1.352, L Bhargava Kumar, Prasad Naik R, and Prabu Krishnan, <https://doi.org/10.1117/1.OE.61.7.076107> .
3. **“RIS assisted Triple-hop RF-FSO convergent with UWOC System”** - IEEE Access (2022) – Volume no. 10: pages: 66564 – 66575, Q1, IF – 3.476, L Bhargava Kumar, R Prasad Naik, Prabu Krishnan, Arockia Bazil Raj, and Arun K Majumdar, Wan-Young Chung, <https://doi.org/10.1109/ACCESS.2022.3185123> .
4. **“Performance Analysis of Multi-hop FSO Convergent with UWOC System for Security and Tracking in Navy Applications”** - Optical and Quantum Electronics (2022) 54:327 – Springer – SCIE, Q2, IF – 2.794, L Bhargava Kumar, Prasad Naik R, and Prabu Krishnan, <https://doi.org/10.1007/s11082-022-03712-w> .

5. **“Underwater Wireless Optical Communication based Reconfigurable UOWSN for Monitoring and Discovering the Continental Margin Ore Deposits”** – Applied Optics 61, no. 11 (2022): 3141-3149. – Optica Publishing Group – SCIE, Q2, IF – 1.980, **L Bhargava Kumar**, Prasad Naik R, Prabu Krishnan, and Arun K Majumdar, <https://doi.org/10.1364/AO.454651> .
6. **“Performance enhancement using multiple input multiple output in dual-hop convergent underwater wireless optical communication-free-space optical communication system under strong turbulence with pointing errors.”** Optical Engineering 60, no. 10 (2021): 106106 – SCIE, Q2, IF – 1.352, **L Bhargava Kumar**, Prasad Naik R, and Prabu Krishnan, <https://doi.org/10.1117/1.OE.60.10.106106> .
7. **“Asymptotic bit error rate analysis of convergent underwater wireless optical communication-free-space optical system over combined channel model for different turbulence and weather conditions with pointing errors.”** Optical Engineering 59, no. 11 (2020): 116102 – SCIE, Q2, IF – 1.352, **L Bhargava Kumar**, and Prabu Krishnan <https://doi.org/10.1117/1.OE.59.11.116102> .
8. **“Multi-hop convergent FSO-UWOC system to establish a reliable communication link between the islands.”** Optics Communications 474 (2020): 126107 – SCIE, Q2, IF – 2.335, **L Bhargava Kumar**, and Prabu Krishnan, <https://doi.org/10.1016/j.optcom.2020.126107> .
9. **“Design and development of a climbing robot for several applications.”** International Journal of Advanced Computer Technology 3, no. 3 (2011): 15-23 - Open Access, IF – 3.0 Subramanyam A, Y Mallikarjuna, S Suneel, **L Bhargava Kumar**.
10. **“Highway Vehicle Speed Control & Automatic Breaking System.”** IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) Volume 9 – Open Access, IF – 3.12 Subramanyam A, K Satyajesh, and **L Bhargava Kumar**.

International Conference Publications

1. **“BER Performance Analysis of Optical Wireless Communication System over Weak and Strong Underwater Turbulence Channels”** – Proceedings of Second International Conference on Computational Electronics for Wireless Communications - ICCWC-2022 – Springer – Scopus Index – Accepted - Volume 554, pp. 615-625, Lecture Notes in Networks and Systems. ISSN - 2367-3370, https://doi.org/10.1007/978-981-19-6661-3_56

R Prasad Naik, U Shripathi Acharya, **L Bhargava Kumar**, Prabu Krishnan, and Wan Young Chung – Best Paper Award.

2. **“Outage Probability Analysis of Variable and Fixed Gain Relay-Assisted Dual-Hop RF-FSO Links Using Space-time Block Code Users”** – Proceedings of Second International Conference on Computational Electronics for Wireless Communications - ICCWC-2022 – Springer – Scopus Index – Accepted - Volume 554, pp. 639-646, Lecture Notes in Networks and Systems. ISSN - 2367-3370, https://doi.org/10.1007/978-981-19-6661-3_58

R Prasad Naik, **L Bhargava Kumar**, Prabu Krishnan, and Wan Young Chung.

FDP's Conducted

1. A two-day international conference, "ICCWC – 2022" organized by the Department of Electronics and Communication Engineering, National Institute of Technology Karnataka, Surathkal. <https://iccwc22.in/student>
2. A five-day workshop on "Recent trends in Free Space Optics and its Applications" – RFA – 2021 organized by the Department of Electronics and Communication Engineering, National Institute of Technology Karnataka, Surathkal, from 04th to 08th October 2021.
3. A five-day workshop on "Recent Trends in Nanoelectronics and Optoelectronics" – RNO – 2020 organized by the Department of Electronics and Communication Engineering, National Institute of Technology Karnataka, Surathkal, from 12th to 16th October 2020.
4. A two day "National symposium" - Sankethika 2017 organized by Sree Venkateswara College of Engineering, Nellore, from 21st to 22nd January 2017

FDP's Attended

1. A five day skill development program on "ARM based Embedded System Design" organized by the School of Electronics and Communication Engineering, KLE Technological University, Hubballi, from 23rd to 27th May 2023.
2. A five day skill development program on "dSPACE - HIL Testing Software" organized by the School of Electronics and Communication Engineering, KLE Technological University, Hubballi, from 5th to 11th January 2023.
3. A two day training program on "QUANSER - CAR" (Q-CAR) organized by the School of Electronics and Communication Engineering, KLE Technological University, Hubballi, in the month of December 2022.
4. A five day skill development program on "Global Navigation Satellite Systems" – 2022 organized by the Department of Electronics and Communication Engineering, IITDM, Kurnool, from 25th to 29th July 2022.
5. A five day workshop on "Recent trends in Free Space Optics and its Applications" – RFA – 2021 organized by the Department of Electronics and Communication Engineering, National Institute of Technology Karnataka, Surathkal, from 04th to 08th October 2021.
6. A four week "Online Internship on Small Satellite Design" jointly organized by NITK-STEP & NPHSAT Systems PVT LTD, from 9th August 2021 to 8th September 2021.
7. A five-day workshop on "Recent Trends in Nanoelectronics and Optoelectronics" – RNO – 2020 organized by the Department of Electronics and Communication Engineering, National Institute of Technology Karnataka, Surathkal, from 12th to 16th October 2020.
8. A five day "Summer School in Optics and Photonics" - SOAP-2019 organized by the Department of Electrical Communication Engineering, IISc Bangalore, from 17th to 21st June 2019.

Certifications- Nil

Book Publication

“A book on UGC/CBSE-NET Electronic Science”, Paper-II, Paper-III, 2017-18.

Subramanyam A, **L Bhargava Kumar**, S Suneel.

Amazon Url:

https://www.amazon.in/UGC-CBSE-NET-ELECTRONIC-SCIENCE/dp/B072KKH8TB/ref=sr_1_1?crid=1MBEDDLMJKA14&keywords=l+bhargava+kumar&qid=1642093024&s=books&sprefix=l+bhargava+%2Cstripbooks%2C281&sr=1-1

Book chapters

1. **“BER Performance Analysis of Optical Wireless Communication System over Weak and Strong Underwater Turbulence Channels”** – Proceedings of Second International Conference on Computational Electronics for Wireless Communications - ICCWC-2022 – Springer – Scopus Index – Accepted - Volume 554, pp. 615-625, Lecture Notes in Networks and Systems. ISSN - 2367-3370, https://doi.org/10.1007/978-981-19-6661-3_56

R Prasad Naik, U Shripathi Acharya, **L Bhargava Kumar**, Prabu Krishnan, and Wan Young Chung – Best Paper Award.

2. **“Outage Probability Analysis of Variable and Fixed Gain Relay-Assisted Dual-Hop RF-FSO Links Using Space-time Block Code Users”** – Proceedings of Second International Conference on Computational Electronics for Wireless Communications - ICCWC-2022 – Springer – Scopus Index – Accepted - Volume 554, pp. 639-646, Lecture Notes in Networks and Systems. ISSN - 2367-3370, https://doi.org/10.1007/978-981-19-6661-3_58

R Prasad Naik, **L Bhargava Kumar**, Prabu Krishnan, and Wan Young Chung.

Any Other Achievements

Awards Received

1. GATE scholarship from MHRD-INDIA for M. Tech and Ph. D.

Invited Talks (Resource Persons)

Faculty Sessions

Reviewer for International Journals

1. Reviewer for IEEE-Access Journal.
2. Reviewer for IEEE Internet of Things Journal.
3. Reviewer for OSA-Applied Optics Journal.