


CURRICULUM VITAE

Full Name	Dr. IBRAR JAHAN M A Associate Professor	
Total Teaching Experience	22 years	
Date of Birth	04/07/1980	
Contact Number	9008085384, 9611319869	
E-mail ID	ibrarjahan20@gmail.com ibrarjahan.m@rnsit.ac.in https://www.linkedin.com/in/ibrar-jahan-m-a-ph-d-b034ba268/	
Address	HIG-B-5, House No. 30, Building No. 55, Shirke Apartment, Kengeri Satellite Town, Bangalore – 560060	
Nationality	Indian	
Religion	Islam	
Languages Known	English, Urdu, Kannada & Hindi	

Education Details

- PhD (Integrated Photonics) from Visvesvaraya Technological University, Bangalore, Karnataka, 2022.
- M.Tech in VLSI Design and Embedded Systems from UTL Technologies, VTU Extension Center, Bangalore with FCD (7.95) completed in the year 2009.
- B.E in Medical Electronics from MS Ramaiah Institute of Technology, Bangalore with FCD (78%) completed in the year 2002.
- 10th from Cluny Convent High School, Jalahalli, Bangalore with 72.4% completed in the year 1996.

Additional Skills

- Completed 6 months Professional Certificate course in Applied AI and Machine Learning from Electronics & ICT Academy Indian Institute of Technology Guwahati in association with Simplilearn.
- Pursuing PG Diploma course on Data Science and Quantum Computing ABV-IIITM Gwalior, sponsored by AICTE
- Completed NPTEL course on “Intellectual Property Rights and competition Law” with Elite certificate.
- Completed NPTEL course on “Effective Writing” with Elite certificate.
- Completed NPTEL course on “Photonic Crystals Fundamentals & Applications” with Elite certificate.
- Completed NPTEL course on “Python for Data Science” with Elite certificate.
- Pursuing NPTEL course on “Quantum Computing” offered by IIT Madras

Recognition

Recognized Research Supervisor under VTU with Registration ID:042024RSEC005280

Employment Details

Sl. No	Employer	Position held	Subjects taught	Date of joining	Date of leaving
1	RNS Institute of Technology, Channasandra, Bangalore	Associate Professor	Basic Electronics, GSM, Wireless Communication, 8086 Microprocessor, 8051 Microcontroller, Field Theory, Electromagnetic Waves, MWA, AEC, VLSI Design, Biology for Engineers, Advance VLSI, Biology for Engineers, CO etc., M.Tech Subjects: VLSI Testing, Low Power VLSI Design, Hardware & Software Co-design, Research Methodology	19 th July 2010	Currently Working
2	UTL Technologies Ltd, VTU Extension Centre, Bangalore	Sr. Lecturer	Embedded Systems, VLSI Design	September 2009	July 2010
3	Ghousia College of Engineering, Mysore Road, Ramanagaram, Bangalore	Lecturer	Basic Electronics, AEC, VLSI Design, Mixed Mode VLSI Design	September 2006	August 2009
4	Islamia Institute of Technology, Bannergatta Road, Bangalore	Lecturer	Basic Electronics, AEC, Electronics & Instrumentation, Network Theory	September 2005	September 2006
5	B.S.V.P ITI College, Kommagotta, Kengeri Satellite Town, Bangalore	Lecturer	Basic Electronics, Basic Electrical, General Maths	November 2002	August 2005

Publication Details

1. **Ibrar Jahan M A** “Design of 1 GHz VCO for Frequency Synthesizer using 0.18 μ m Technology” at National Conference on VLSI & Multimedia Communication-2009 (NCVM_09) held at R.V.College of Engineering, Bangalore Sponsored by IETE.
2. **Ibrar Jahan M A**, Aruna M “Digital System Design & Implementation for FPGA based System-on Chip” at National Conference on Recent Advances in Electronics & Communication, Rajiv Gandhi Institute of Technology, 2013.
3. **Ibrar Jahan M A**, Dr. Rajini V Honnunar, Versha R, “Analysis and Sensitivity Improvement of FBG Sensor”, IEEE International Conference on Recent Advances in Electronics & Communication Technology, ICRAECT-2017 held at SJBIT, Bangalore on 16th to 17th March 2017.

4. **Ibrar Jahan M.A**, Dr. Rajini V Honnunar, Versha R, “Analysis of FBG sensor for Accurate pressure sensing with improved sensitivity”, 7th International conference on Materials Processing & Characterization, ICMPC-2017 held at GRIET, Hyderabad on 17th to 19th March 2017.
5. **Ibrar Jahan M.A**, Vannalu Aruna, Design and FPGA Implementation of HDLC Framer/De-framer for High Speed Telecommunication Application”, 2nd International Conference on Circuits, Controls & Communication-CCUBE held at RNSIT, December 15-16, 2017.
6. **Ibrar Jahan M A**, Rajini V Honnunar, Versha, “Analysis of FBG sensor for accurate Pressure sensing with improved sensitivity,” Materials Today Proceedings, Vol. 5, Issue 2, pp. 5452-5458, 2018.
7. **Ibrar Jahan M A**, Rajini V Honnunar, Anup Upadhya “Sensitivity Improvement and Opto Mechanical Analysis of Composite Material Using Fiber Bragg Grating,” International Journal of Engineering and Technology, Vol. 7, no. 4, Issue 36, pp. 204-211, 2018.
8. Chethana K, Rajini V Honnunar, **Ibrar Jahan M A**, Asokan S,”Comparison Studies on Hand Grip Measurement Techniques using FBG Sensor and sEMG,” 2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), July 2-4, 2020.
9. Chethana K, Rajini V Honnunar, **Ibrar Jahan M A**, Bhargava N, Haripriya and Asokan S,” Design and Calibration of Fiber Bragg Grating Sensor for Analysis of Real Time Skeletal Hand Muscle Strength,” IEEE International Conference for Innovation in Technology (INOCON), November 6, 2020.
10. Chethana K, Rajini V Honnunar, **Ibrar Jahan M A**, Asokan S, “Computational Analysis of Fiber Bragg Grating Based Hand Grip Measuring Device for Assessment of Post Surgical Rehabilitation,” European Journal of Molecular and Clinical Medicine, Vol. 7, Issue 8, pp. 2842-2848, 2020.
11. **Ibrar Jahan M A**, Bhoomika, Malathi Sathish,” Waveguide Bragg Grating Bio-sensor for Early detection of cancer and blood disorder,” National Conference on Recent Trends on Engineering, Science and Technology, 2020 (**Received Best Paper Award**).
12. **Ibrar Jahan M A**, Bhargava Narayana, Vishwas, “Fiber Bragg Grating Sensor to measure Hand Grip Strength,” National Conference on Recent Trends in Engineering, Science & Technology”, 2021 (**Received Best Paper Award**).
13. **Ibrar Jahan M A**, Rajini V Honnunar, Chethana K, Asokan S, “Design and Development of Optical Fiber Bragg Grating based Device for Measurement of Handgrip Force,” Optical and Quantum Electronics Journal, Vol. 54, Issue 1, pp.1-13, 2022.
14. Chethana K, Rajini V Honnunar, **Ibrar Jahan M A**, S Asokan, R Bhargav Narayan “Experiments and Modeling of Hand Grip Strength Measurement for Musculoskeletal Parameters Monitoring,” International Conference on Computing Sustainable Global Development, INDIACom 2022.
15. **Ibrar Jahan M A**, Venkatesha M, Lalit Singh, Malathi Sathish, Rajini V Honnunar, “Design and Modeling of Ultra-compact and Highly-sensitive Silicon Bragg Grating Sensor for Biochemical Sensing Applications,” Silicon Journal, Vol. 14, pp. 10909–10917, 2022.
16. **Ibrar Jahan M A**, Ciro Rodriguez Rodriguez, Rajini V Honnunar, “Modeling and Simulation of FBG based pressure sensor for Micro Level Strain Measurement, “IEEE International Conference on Electronics, Computing and Communication Technologies, CONECCT, 2022.
17. **Ibrar Jahan M A**, Venkatesha M, Ciro Rodriguez, Rajini V Honnunar, “Bragg Grating based Nanophotonic Biochemical Sensor with Enhanced Light Matter Interaction,” Optoelectronics and Advanced Materials- Rapid Communications Journal, Vol. 7, pp. 99-105, 2023.

18. S. Sivakumar, R. V. Lakshmi, V. R. Balaji, **M. A. Ibrar Jahan**, G. Hegde and R. J. Stanislaus, "Square Ring Resonator based Photonic Crystal for Pressure Sensing," 2023 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT), Bangalore, India, 2023, pp. 1-6, doi:10.1109/CONECCT57959.2023.10234681.
19. Balaji V R, Shanmuga Sundar Dhanabalan, **Ibrar Jahan M A**, "Photonic Crystal Based 2D Demultiplexer for DWDM Systems," Springer Tracts in Electrical and Electronics Engineering Book Series, pp. 113-130, 2023.
20. **Ibrar Jahan M A**, Balaji V R, Jeswanth Sugesh, Richards Joe S, Sangeetha G, "2D Photonic Crystal for the Detection of Infectious Virus and Bacterial Diseases," Advances in Biophotonics, Nanofabrication, Optical Metrology and Nonlinear and Ultrafast Photonics, pp. 187-196, August 2025.
21. V.R Balaji, **M.A Ibrar Jahan**, T. Sridarshini, S. Geerthana, Arun Thirumurugan, Gopalkrishna Hegde, R. Sitharthan, Shanmuga Sundar Dhanabalan, Machine learning enabled 2D photonic crystal biosensor for early cancer detection, Measurement, Vol. 224, 2024, 113858, ISSN 0263-2241, <https://doi.org/10.1016/j.measurement.2023.113858>.
22. **Ibrar Jahan M A**, Ranjith B Gowda, Archana Yadav, V R Balaji, Supritha T R," Nano Photonic Crystal based Sensor for Diabetes Mellitus Detection," Workshop in Recent Advances in Photonics, IIIT Alahabad, December 7-9, 2023.
23. **Ibrar Jahan M A**, Balaji V R, Shanmuga Sundar Dhanabalan, T Sridarshini, "Integrated Photonic Device for Cancer Detection," Advances in All Optical Communications, Advances in All Optical Communications, IOP Institute of Physics Book Chapter, pp. 10-1 to 10-18, Nov 2024.
24. R G Jesuwanth Sugesh, V R Balaji, A Sivasubramanian, Gopalkrishna Hedge, **Ibrar Jahan M A** and Richards Joe Stanislaus, "Silicon photonic modulators for high-speed applications—a review," Advances in All Optical Communications, IOP Institute of Physics Book Chapter, pp. 5-1 to 5-18, Nov 2024.
25. **Ibrar Jahan M A**, Rajini V Honnunar, "FBG based Device for the Quantification of Muscle Strength," Photonic Sensor for Biomedical Applications, Apple Academic Press, 2025.
26. **Ibrar Jahan M A**, Rajini V Honnunar, V L Nandhini, V L Malini, Harpreet Vohra, V R Balaji, Sandip Kumar Roy, "Deciphering the sensory landscape: a comparative analysis of fiber Bragg grating and strain gauge systems in structural health Monitoring," Journal of Optics, pp. 1-9, 2024.
27. Anusha R, **Ibrar Jahan M A**, Prabhavathi C N "Turbo Code Using MAP Algorithm with Improved Area and Efficiency," International Journal of All Research Education and Scientific Methods, Vol. 12, Issue 7, pp. 3230-3238, July 2024
28. **Ibrar Jahan M A**, Archana Yadav, Sarita Kumari, V R Balaji, Srujana R, "Comprehensive Study of Wearable Healthcare Devices using IOT," Smart IoT for Sustainable Development: Transforming Industries and Societies, CRC Press. (under publication).
29. Chethana K, **Ibrar Jahan M A**, Malathi Sathish, Gopalkrishna Murthy C R, "A Single FBG Sensor for Measuring Multiple Parameters across Different Structures, 2nd International Conference on Computational and Characterization Techniques in Engineering & Sciences, CCTES-2024.
30. Rajini V Honnunar, **Ibrar Jahan M A**, Malathi Sathish, "Design of a Fiber based Full Duplex Front Haul Radio System," 2nd International Conference on Computational and Characterization Techniques in Engineering & Sciences, CCTES-2024.
31. Anand Prakash Narayan, **Ibrar Jahan M A**, Gaurav Kumar Bharti, "Modelling of Fiber Bragg Grating for

32. T. Khurana, N. Chaubey, **I. J. M. Aslam**, G. K. Bharti, Design and Development of Programmable Interface of FBG Sensors for Plantar Pressure Measuring Device IEEE International Conference on Emerging Engineering Technologies and Applications (IC-EETA), Medi-caps University Indore, 6-8 Nov, 2025 (Accepted)
33. **I. J. M. Aslam**, A. Yadav, G. K. Bharti, D. S. Bhat, G. R. S. Kumar, J. B. Shreesha, A. Amphawan, Design and Analysis of D-shaped Optical Fiber Biosensor for Human Teeth Disease Detection, International Conference on Computer, Information Technology and Intelligent Computing 2025 (CITIC 2025), Multimedia University, Malaysia, 21-23 July
34. **I. J. M. Aslam**, S. Jamuna, G. K. Bharti, R. Kavya, Khushi, S. A. Ibrahim, A. Amphawan, Design and Simulation of Radiation-Hardened Conductive-Bridge RAM Cell Towards Durable Artificial, Multimedia University Engineering Conference 2025 (MECON 2025), Multimedia University, Malaysia, 21-23 July
35. **I. J. M. Aslam**, R. V. Honnunar, G. K. Bharti, S. Suresh, S. Setlur, A. Amphawan, “Design and Development of a Wearable Device for Knee Joint Health Monitoring” International Conference on Computer, Information Technology and Intelligent Computing 2025 (CITIC 2025), Multimedia University, Malaysia, 21-23 July.
36. Narayan Nirala, G., Kaur, S., PR, Y., Arun Kumar, B. and **Jahan MA, I.**, 2025. Enhanced sensitivity based surface plasmon resonance biosensor for clinical applications. Journal of Optics, pp.1-12.
37. Nirala, G.N., Kaur, S., Shahiruddin, Yashaswini, P.R. and **Ibrar Jahan, M.A.**, 2025. Photonic crystal based finer surface plasmonic sensor for detecting cancer. OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, 19(5-6), pp.251-262.

FDP/Workshops Attended

1. Three days FDP on “Automotive Infotronics” from 27th to 29th January 2011 at SJBIT, Bangalore.
2. One day Workshop on “Bio-Medical Applications of Optical Sensors” held on 23rd September 2014 at Sai Vidya Institute Of Technology, Bangalore.
3. Two weeks AICTE Sponsored FDP on “Advance Communication Technologies” from 15th to 27th July 2013 at RNSIT, Bangalore.
4. Two Days workshop on “Research, Statistics & BCI Application” from 28th to 29th September 2011 at Ghousia College of Engineering, Ramanagaram.
5. Five days FDP on “Matlab & its Applications to DSP, DIP & Power Electronics” from 25th to 29th July 2011 at RNSIT, Bangalore.
6. Two days workshop on “Antenna Design & Simulation Techniques” from 16th to 17th June at RNSIT, Bangalore.
7. Three days FDP on “Python Programming & Application” from 18th to 20th June, 2018 at RNSIT, Bangalore.
8. Four days workshop on “Analog and Digital VLSI Design”, from 21st to 25th June, 2018, at RNSIT, Bangalore.

9. Three days workshop on “Computer Networks Laboratory using NS3, NCTUNS and C/C++ from 23rd to 25th January, 2018, at RNSIT, Bangalore.
10. One day workshop on “Optical Communication Systems and Photonics”, on 11th May 2019 at RNSIT, Bangalore.
11. FDP on Advancement in Signal and Image Processing from 8th to 12th February, 2021, Atria Institute of Technology, Bangalore.
12. FDP on Essential Skills and Technologies for Quality Research, April 30, 2021, PES college of Mandya.
13. FDP on Recent Trends in Photonics from 14th to 19th June, 2021, Oxford College of Engineering, Bangalore.
14. ATAL FDP on Recent Trends in the World of Photonics from 26th to 30th July, 2021, RNSIT, Bangalore.
15. ATAL FDP on Smart Sensors Based Industrial Automation and Healthcare Technology, from 7th to 11th June, 2021, PSR Engineering College, Tamil Nadu.
16. Short Term Training Program on Emerging Tools and Techniques in VLSI, MEMS and MOEMS, from 25th to 29th January, 2022, Swami Keshvanand Technogy and Management, Jaipur.
17. FDP on Research Trends in Optical Technologies and its Applications from 5th to 9th January, 2023, Vellore Institute of Technology, Chennai.
18. FDP on Recent Advancements in Science and Technology, from 6th to 10th March, 2023, Alliance University, Bangalore.
19. FDP on Analog VLSI Design using EDA Tools, from 20th to 25th March, 2023, AICTE VTU from 20th to 25th 2023, Bangalore.
20. Participated in one month course on “Quantum Computing using Indigenous Quantum Simulator QSim” jointly organized by IIT Roorkee and C-DAC Hyderabad with the support of Ministry of Electronics and Information Technology, Government of India, 6th to 28th May, 2023.
21. Participated in Online Introductory Sessions on Optiwave Photonic Design & Simulation Tools Conducted by HR Universal Systems Inc., Delhi-NCR on 15th, 16th, 22nd, 23rd, 29th & 30th June, 2023.
22. FDP on VLSI to System design: Silicon to end application from 31st July to 4th August 2023, AICTE, Arm and Cadence System, Bangalore.
23. Workshop on Empowering Innovation: Ansys Lumerical for Photonics on 27th to 28th July 2023, Prakash Bharati, Ansys CADFEM, Bangalore.
24. Workshop on Silicon Photonics from 5th to 10th February 2024, Department of ECE, NIT, Delhi.
25. FDP on UHV-1 Self funded from 10th to 12th May, 2024, UHV Cell, RNS Institute of Technology, Bangalore.
26. ATAL FDP on The Role of Fiber Optic Sensors in Sustainable Technology organized by The Oxford College of Engineering, Bangalore from 19th to 24th August, 2024.
27. Refresher Course on Materials for Energy and Sustainability under Malaviya Mission Teacher Training Program of UGC organized by MMTTC Center for Science and Society-IISERB, Bhopal from 4th to 18th November 2024.

28. Workshop on Next Generation Photonic Communication Design with Optiwave by Optiwave Systems and IEEE Photonics Society on 16th November 2024.
29. FDP on Frontiers of Photonic Integrated Circuits and Sensing Technologies conducted by The oxford college of Engineering from 1st April to 5th April 2024.
30. Online FDP on IOT conducted by SkillDzire and AICTE duration of 1 month.

Projects Guided

Sl. No.	Name of the student	Title of the thesis	BE Or Master's level	Year of completion	Co-Guides (if any)
1	Group of 4 students	Design and Sensitivity Improvement of FBG based Sensor	BE	2016	No
2	Group of 3 students	Modeling and Simulation of FBG as a Humidity Sensor for Structural Health Monitoring of Aircrafts.	BE	2017	No
3	Group of 4 students	Design and Modeling of Integrated Optic Temperature Sensor using Mach-Zehnder Interferometer.	BE	2017	No
4	Group of 2 students	Design, Modeling and Simulation of FBG Sensor for Pressure Sensing Application.	BE	2018	No
5	Group of 3 students	Health Monitoring of Composite Structures using FBG Sensor.	BE	2019	No
6	1 student	Modeling and Analysis of Waveguide grating based Bio-sensor	M.Tech	2020	No
7	Group of 2 students	Guided project on topic Design and Analysis of FBG Sensor for Measurement of Hand Grip Strength (Received Best Project Award).	BE	2021	No
8	Group of 4 students	Design and Analysis of Slab based Waveguide Bragg Grating Sensor for Measurement of Temperature.	BE	2022	No
9	Group of 2 students	Real Time Manhole Gas detection System	BE	2022	No
10	Group of 4 students	A Biomechanical Device for Acquisition and Assessment of Plantar Pressure.	BE	2023	No
11	Group of 4 students	Cancer Detection using Photonic Crystal based Biosensor.	BE	2023	No
12	Group of 4 students	Design and Modeling of Photonic Crystal based Sensor for detection of chemicals.	BE	2023	No
13	Group of 4 students	Health Monitoring System	BE	2023	No
14	Group of 2 students	Photonic Crystal as Mux and Demux for Communication	BE	2023	No
15	Group of 4 students	Design and Development of a Device to Monitor Diabetic Foot Pressure	BE	2023	No
16	Group of 4 students	Design and Development of a Device to Monitor the Health of the Knee Joints	BE	2024	No
17	Group of 3 students	Design and Analysis of SPR Biosensor in Healthcare	BE	2024	No

18	Group of 2 students	Design and Simulation of CBRAM Cell using Radiation hardening Technique	BE	2024	Yes
19	Group of 2 students	Design of MOSFET based Current Mirror Circuit using 45 nm Technology	BE	2024	Yes
20	Group of 4 students	Swasthya: A Diagnosis System for early detection and prevention of disease	BE	2024	Yes

Academic & Administrative Responsibilities

1. Handled the responsibility of set up of Microprocessor Lab, VLSI Lab and Labview lab in-charge and time table officer for 2 years.
2. Labs Handled: Logic Design, VLSI, Microprocessor and Microcontroller, Advance Communication Lab, Analog circuit lab, labview.
3. Co-ordinator of Internal Quality Improvement Committee (IQIC) of first year students.
4. Session Chair and Reviewer in National Conference on Recent Trends in Engineering, Science and Technology held in the ECE Department, RNSIT during 2019, 2020, 2021, 2022, 2023 and 2024.
5. Co-ordinator of National Conference on Recent Trends on Engineering, Science and Technology, held on June 22nd 2022, Department of ECE, RNSIT.
6. Organizing committee member of ATAL FDP on Recent Trends in Photonics from July 26th to July 30th 2021, Department of ECE, RNSIT
7. Co-ordinator of Criteria 5 of NBA document.
8. Co-ordinator of Criteria 3 of NAAC document.
9. Member of KAPILA and IPR Cell, RNSIT.
10. Member of Center of Excellence in Material Science and Devices, RNSIT.
11. Research Co-ordinator ECE Department, RNSIT.
12. Department Co-ordinator for book of Abstract.
13. Served as class teacher and student Mentor.

Books Published

1. Published a Text Book on “**Basic Electronics**”, in 2015, Publication: IK International, Authors Dr. Uma Rao, Ibrar Jahan M A
2. **Fundamentals of Semiconductor Devices**, Dr. Gaurav Kumar Bharati, Nudrat Sufiyan, Dr. P R Yashaswini, Dr. Ibrar Jahan M A, Scientific International Publishing House, 2023.
3. Editor for the edited book titled **Futuristic Trends in Chemical Material Sciences & Nano Technology**, Volume 3, book 25, IIP Series, 2024.

Invited Talks

1. Presented a talk on FBG Sensors-Principles and Applications on International Light Day at Sir M. Visvesvaraya Institute of Technology, Bangalore on 2nd July 2021.
2. Presented a talk on Design of FBG Sensor for Sensing Application at RNSIT, Bangalore on 27th September 2021.
3. Presented a talk on Silicon Photonics & Applications at RNSIT, Bangalore on 10th October 2022.
4. Presented a talk in Faculty Development Program (FDP) on “Research Trends in Optical Technologies and its Applications (RTOTA-2023)” held at Vellore Institute of Technology, January 05th -09th, 2023.
4. Presented a talk in AICTE sponsored Faculty Development Program (FDP) on “Analog VLSI Design” held at VTU, Mudenahalli Campus, March 20-25, 2023.
5. Presented a talk at Ghousia College of Engineering on 16th February 2024 on “Photonics Technology of the Future”
6. Presented a talk at IIIT Bhopal on 1st November 2024 on “Optical Grating devices for Biosensing: Innovations in Health Monitoring”
7. Presented a talk in Five day Faculty Development Program (FDP) on “Photonic Integrated Circuits and Sensing Technologies” held at The oxford College of Engineering, 2nd April, 2024.
8. Presented a talk in Faculty Development Program (FDP) on “Research Trends in Optical Technologies and its Applications (RTOTA-2024)” held at Vellore Institute of Technology, on February 18th 2024.
9. Presented a talk on Grating based devices for Healthcare at IIIT Bhopal in November, 2024.
10. Presented a talk in National Workshop On Optical Engineering & Quantum Information Technology Organized By BLDEA’s V.P. Dr. P.G. Halakatti College Of Engineering & Technology on 12th April 2025.
11. Presented a talk in workshop on Computational Photonics held at Vemana College of Engineering on 20 August, 2025
12. Presented a talk on AI Enabled Photonic Sensor for Digital Health Tech” in the FDP “AI & IoT for Cross Sectoral Innovation” organized by ABV-IIIT Gwalior on 26 August, 2025.

Patent File

1. IITI DRISHTI CPS Foundation will be submitting the Indian Design Patent on Optical-based Plantar Pressure Measuring Device.

Project Proposal Submitted

1. Submitted a project proposal to Karnataka State Council for Science and Technology under STI scheme, project title “A Biomechanical Foot Balancing Platform to Measure Plantar Foot Pressure”, as PI for funding of Rs. 1,91,900/-.
2. Submitted to Indian Council of Social Science Research, project title “A study on the Socio-economic impact of Pradhan Mantri Fasal Bima Yojana (PMFBY) in Karnataka,” as Co-PI for a funding of Rs. 14,95,000/-.
3. Submitted proposal for AORP under VGST, 2023.
4. Submitted proposal to AICTE ATAL for 6 Days FDP on Advancement in Optical Communication, Sensors and Devices as Co-PI 2023.
5. Submitted proposal to Serb Power scheme, project title “Investigation of Nano-Materials for Sustainable Energy and Environmental Applications“ as Co-PI for a funding of Rs. 25,00,000/-, status Accepted for Evaluation.
6. Submitted proposal to IIT BHILAI INNOVATION AND TECHNOLOGY FOUNDATION (IBITF) project title “Design and Development of Wearable FBG Sensing Device for Real-Time Knee Joint Health Monitoring in Physiotherapy” as PI for a funding of Rs. 25,00,000/- (14/12/2024).

Project Proposal Granted

1. Project title “Design of FBG Assisted AI Based Plantar Pressure Measuring device for Clinical Applications” for a amount of Rs. 10,00,000/- by IITI DRISHTI CPS Foundation under the NM-ICPS scheme as Co-PI.
2. Project title “Design and Development of a Wearable FBG-based Joint ROM device in different Physiotherapy Applications” for an amount of Rs. 17,99,000/- DivyaSampark iHUB for Devices Materials and Technology Foundation as Co-PI.
3. Received a grant of Rs. 22,500/- under URF scheme for a project titled “Design and Development of a device to Monitor Diabetic Foot Pressure” from RNSIT.

Other Achievements

1. Participated in Synergy State Level Project Exhibition organized by IEEE Atria Institute of Technology jointly with Amrita Vishwa Vidyapeetham on 28th June 2022. Received certificate of Appreciation for developing a low-cost device for Manhole Gas Detection System.
2. A Biomechanical Foot Balancing Platform to Measure Plantar Foot Pressure, received 2nd prize of a cash award of Rs. 20,000/ and Rs. 60,000/ Free Incubation at AIC-DSU Innovation Foundation, 2022.
3. Received Padmashri Dr. S K Shivkumar Innovative Project Award at undergraduate level for the project title “Biomedical foot balancing platform to measure plantar foot pressure” by Karnataka Science and Technology Academy (KSTA) 2022-23.
4. Sanctioned an amount of Rs. 5000/- from KSCST for a project “A biomechanical device for acquisition and assessment of plantar pressure” and the project has been selected for state level Exhibition by Karnataka State Council for Science and Technology, 2023.
5. Received Fellowship in 7th Edition of IEEE International Test Conference, India (Fellowship to attend the conference and tutorials), 2023, Bangalore.

6. Received 1st prize for best paper presentation for a project entitled “Enhanced pressure sensing with square wave resonator in 2D photonic crystal,” at Symposium on Photonic Technology and its Applications held in Hybrid Mode at RNSIT, Bangalore on 10th June, 2023.
7. Project entitled “Biomedical foot balancing platform to measure plantar foot pressure” was selected by INEX Karnataka Chapter for International Innovation & Invention Expo 2023.
8. Sanctioned an amount of Rs. 6500/- from KSCST for a project “Design and Development of a Device to Measure Diabetic Foot Pressure” and the project has been selected for state-level Exhibition by Karnataka State Council for Science and Technology, 2024.
9. Received 1st Prize and a cash amount of Rs. 10,000/- in National Science Fair-2024 held at JSS Institute of Technology for a project entitled “Design and Development of a Device to Measure Diabetic Foot Pressure”.
10. Received certificate of recognition for contributing towards YPSIC 2023.
11. Serving as reviewer for International Conference and for International Journals.
12. Chaired a Technical session in 2nd International Conference on Computing Characterization Techniques in Engineering and Sciences (CCTES-2024) held on November 15th to 16th 2024.

Volunteer Service in IEEE

1. Served as mentor for students in Internship Program under IEEE Photonics Society, Bangalore Section.
2. Selected as Student Mentor in the IEEE India Council Student Mentorship Program (SMP-2024).

Membership in Professional Organizations

Sl. No	Name of the Body	Status of Membership Life /Annual
1	MISTE	Life Time
2	Senior IEEE Member	Annual
3	Secretary of Photonic Society chapter, IEEE Bangalore section	Annual
4	EXECOM Member of IEEE Prakash Bharti, Photonic Society of India	Annual
5	IEEE Photonics Society Chapter Advisor and Chapter Advisor of IEEE Sensor Council RNSIT	Annual

I hereby certify that all information provided in this document along with the certificates / testimonials are true and accurate to the best of my knowledge and belief.

Date: 31/08/2025

Dr. IBRAR JAHAN M A