Mr. Subrahmanya K N

Assistant Professor

Educational Qualification	B. E. (Electronics and Communication Engineering), M.Tech. (Communication Systems). Ph.D. (Photonics)
Experience	Teaching: 11 Years. Industry: 3.5 Years
Area of Interest	Surface metrology, applied deep learning, optimization, parallel computing, Fringe analysis.
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Date of Joining at RVCE: 17th Aug 2017

Subjects Handled: Optical Fiber Communication, Communication Systems, Electromagnetic Field theory, RFIC design, Analog Microelectronics, Signals and Systems.

No. of Projects guided to UG Students: 8

No. of Projects guided to PG Students: 4

Publication Details:

A. International Journals:

1. Subrahmanya Keremane Narayan, Allaparthi Venkata Satya Vithin, and Rajshekhar Gannavarpu, Deep learning assisted non-contact defect identification method using diffraction phase microscopy, Applied Optics, 62 (20), 5433-5442, 2023.
2. Subrahmanya Keremane Narayan, Allaparthi Venkata Satya Vithin, Sreeprasad Ajithaprasad and Rajshekhar Gannavarpu, Surface profile measurement using nonlinear optimization approach in diffraction phase microscopy, Optics and Laser Technology, 167, 109723, 2023.
3. Subrahmanya Keremane Narayan, Dhruvam Pandey, Allaparthi Venkata Satya Vithin, and Rajshekhar Gannavarpu, Robust method to process nonuniform intensity holograms in digital holographic microscopy for nanoscale surface metrology, Applied Optics, 62 (32), 8497-8505, 2023
4. Subrahmanya Keremane Narayan and Rajshekhar Gannavarpu, Simultaneous estimation of multiple order phase derivatives using deep learning method in digital holographic interferometry, Optics and Lasers in Engineering, 184 (1), 108583, 2025.

5. Subrahmanya Keremane Narayan and Rajshekhar Gannavarpu, Precision surface metrology using rapid optimization method in diffraction phase microscopy, IEEE Transactions on Instrumentation & Measurement [Under Review].

B. International Conferences:

1. Subrahmanya Keremane Narayan, Dhruvam Pandey and Rajshekhar Gannavarpu, "Non-destructive Surface Defect Metrology using Deep Learning and Diffraction Phase Microscopy". Optica Imaging Congress, Toulouse, France, CTh4B.7, 2024.
2. Dhruvam Pandey, Subrahmanya Keremane Narayan and Rajshekhar Gannavarpu, "Deep learning-based automated defect detection in digital holographic microscopy". Optica Imaging Congress, Toulouse, France, JF2A.4, 2024.
3. Subrahmanya Keremane Narayan, Allaparthi Venkata Satya Vithin, and Rajshekhar Gannavarpu, "Non-contact topography using quadratic optimization approach in diffraction phase microscopy", Frontiers in Optics, Washington, USA, FD1.5, 2023.
4. Subrahmanya Keremane Narayan, Viren S Ram, and Rajshekhar Gannavarpu, "Conditional generative modelling based fringe pattern normalization", Optica Imaging Congress, Digital Holography and Three-Dimensional Imaging, Boston, USA, JWA2A.25, 2023.
5. Ajay Kumar GC, KN Subrahmanya, Sajeesh Ammikkallingal, Sai Anudeep Polisetti, "
6.
7. Physical Design, Power and Area Optimization of High Frequency Block at Smaller Technology Node", 4th International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT), 2019.

Consultancy Projects:

Consultancy project executed for TE Connectivity India Ltd, Shirwal, Pune.