

MR. KAILASH KUMAR BORKAR (Assistant Professor) Centre/School/Special Centre: School of Studies in Engineering and Technology (SOSE&T), Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur, chhattisgarh-495009 Department: Industrial & Production Engineering Phone: +91-9827463207 Email: kailashborkar04@gmail.com,

k.k.borkar@ggu.ac.in

Qualifications:

BE (Ind. & Prod. Engineering), MTech (Machine Design), PhD (Pursuing)

Area of Interest/Specialization:

Path Planning and Optimization of Mobile Robot, Machine Design, CAD, Rapid Prototyping.

Experience:

- Working as an Assistant Professor from 24.02.2020 to till date in the department of Industrial & Production Engineering, School of Studies in Engineering and Technology, Guru Ghasidas Vishwavidyalaya (Central University), Bilaspur.
- 2. Worked as an Assistant Professor (on contract) from 06.02.2017 to 21.06.2021 in Mechanical Engineering Department, Guru Ghasidas University, Bilaspur (C.G.).
- 3. Worked as an Assistant Professor from 02.01.2014 to 30.10.2016, in Mechanical Engineering Department, Rungta Engineering College, Raipur (C.G.).

Awards and Honors:

Received Honors in MTech programme (in 2013) **Best Peer Reviewed Publication (up-to 10):**

Journal Papers:

 "Heuristic Rule Base Network Path Analysis and Planning of Wheeled Mobile Robots", International Journal of Research In Aeronautical and Mechanical Engineering, Vol. 1, No. 7 (54-58), 2013.

- "Efficient Approach for Minimizing Tool Paths Length for Bézier Surface from Iso-Scallop Technique", International Journal of Research In Aeronautical and Mechanical Engineering, Vol. 1, No. 7 (47-53), 2013.
- "Design of Sliding Mode Controller Enhanced by Fuzzy Logic Algorithm for Industrial Robot", International Journal of Research In Aeronautical and Mechanical Engineering, Vol. 1, No. 7 (140-148), 2013.

Conference Papers:

- "Path Planning Solution of WMR in Known Dynamic Environment Using Heuristic Rule Base Approach", 7th INTERNATIONAL CONFERENCE ON Computational Optimization, Modelling and Simulation: Recent Trends and Challenges, Organized at RUNGTA COLLEGE OF ENGINEERING AND TECHNOLOGY, BHILAI25th – 26th March 2022
- "Heuristic Rule Based Approach for Obstacle Avoidance of Non-holonomic Wheeled Robot", AICTE sponsored Online National Conference on Recent Advancements in Electrical, Electronics & Instrumentation (NCRAEEI'21) organized by Murugappa Polytechnic College, Chennai, Tamilnadu, India on 26-27 August, 2021.
- 6. "Heuristic Rule Based Path Planning and Path Optimization of Non-holonomic Wheeled Mobile Robots", International Conference on Advance Research Applications in Engineering & Technology, Rungta Educational Campus, Raipur C.G. March 2014.
- "Path Optimization of Non-holonomic Wheeled Mobile Robots using HRBN Technique", International Conference on Emerging Trends in Electrical, Electronics, Instrumentation & Computer Engineering, BIT Raipur, C.G., March 2014.
- 8. "Degree Reduction of Bezier Patches for Sculptured Surface: A Review", International Conference on Emerging Trends in Electrical, Electronics, Instrumentation & Computer Engineering, BIT Raipur, C.G., March 2014.
- "Design a Neural Network controller for Noise Cancellation during Trajectory Tracking for Manipulator Using Matlab", International Conference on Emerging Trends in Electrical, Electronics, Instrumentation & Computer Engineering, BIT Raipur, C.G., March 2014.
- "Design of Intelligent Controller for Path Analysis and Motion Planning of Non-holonomic Wheeled Robot: A Survey", All India Conference on Global Innovation for Technology Development in Mechanical & Mechatronics Engineering, CSIT Durg CG, April 2013.

Administrative Responsibilities:

- 1. Working as Member Anti ragging Cell GGV.
- 2. Worked as BOS members for year 2020, 2021 (departmental level).
- 3. Working as Time Table In-charge (departmental level).
- 4. Semester coordinator for session 2020-21 and 2021-22 (departmental level).
- 5. Working as member AICTE related activity (School level).
- 6. Working as member Alumni Cell (School level).
- 7. Member for B. Tech admission committee for 2021.
- 8. Working as co-coordinator Training and Placement Cell (School level).
- 9. Member of stock verification committee (departmental level).
- 10. Coordinator of purchase committee of minor equipment (departmental level).
- 11. Member for B. Tech admission committee for 2022.

Additional Information:

1. One Month Orientation programme (Guru Dakshta) completed conducted by HRDC Center GGV Bilaspur.

2. Various International/national short-term training/ATAL/webinar attended till date.