# MR. KAILASH KUMAR BORKAR

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# **Educational Qualification**

Since May 2019	SoS in Engg. & Tech. GGV( A central university), Bilaspur (C.G.)	PhD (Industrial & Production Engg. Dept)	Running
2011-13	Institute of Technology GGV( A central university), Bilaspur (C.G.)	M. Tech.  Machine Design  (Mechanical Engineering)	1 <sup>st</sup> Division with <b>Honour</b>
2007-11	Institute of Technology GGV( A central university), Bilaspur (C.G.)	<b>BE</b> Industrial and Production Engineering	1 <sup>st</sup> Division
2005-06	CGBSE, Raipur (C.G.)	Higher Secondary School Education	2 <sup>nd</sup> Division
2003-04	CGBSE, Raipur (C.G.)	High School Education	2 <sup>nd</sup> Division
2017-18	Dr. C V Raman University Bilaspur (C.G.)	Post Graduate Diploma In Computer Application	1 <sup>st</sup> Division

### **WORK EXPERIENCE**

- As an Assistant Professor from 24.02.2020 to till date in Department of Industrial & Production Engineering, School of Studies in Engineering & Technology, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.)
- As an Assistant Professor (Temp. Faculty) from 06.02.2017 to 21.06.2019 in
   Department of Mechanical Engineering, School of Studies in Engineering & Technology, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur (C.G.)
- As an Assistant Professor from 02.01.2014 to 30.10.2016, in Mechanical Engineering
   Department, Rungta Engineering College, Raipur (C.G.).

# **INDUSTRIAL TRAINING (during UG)**

- South Eastern Central Railway (SECR), Bilaspur (C.G.): 6 days training at Railway workshop in Maintenance, Inspection.
- **Bhilai Steel Plant Bhilai (C.G.):** 4 week training at SMS-2, billet Mill, Rail Mill, TPL workshop, Forging Shop etc.

## MY UG PROJECT WORK

**Title:** "Man Power Planning By Using Time & Method Study".

**Descriptions:** The objective of this project is to minimize the work time and man power by applying the Industrial Engineering tools such as time and work study technique.

### **MY PG PROJECT (THESIS)**

**Title:** "Design of Rule Base Network for Path Analysis and Planning of Wheeled Mobile Robot".

**Descriptions:** The objective of this project is to design a minimum path distance travelled by mobile robot and avoid obstacles to obtain the desired goal. This work is based on human perception base heuristic rule.

#### SHORT TERM COURSES/FDP/WORKSHOPS

- 1. Sort Term Course on "**Mechatronics and Robotics**" during 3<sup>rd</sup> July to 6<sup>th</sup> July 2013 at National Institute of Technology, Rourkela-769008, Odisa.
- 2. AICTE Training and Learning (ATAL) Academy Online FDP on "**Robotics**" from 25-05-2020 to 29-05-2020 at NIT Jamshedpur.
- 3. One week online Faculty Development program on, "Industrial Robotics & Its Applications" during 6th July to 11th July 2020, organized by the Mechanical Engineering Department, GMR Institute of Technology, Rajam.
- 4. One week Online Workshop on "Emerging Trends in Robotics" held on July 21 to 25, 2020 Organized by Department Of Mechatronics Engineering, Manipal Institute of Technology.
- One week E- Faculty Development Program on "Advanced Materials and Manufacturing Systems" organized by Department of Mechanical Engineering (Accredited by NBA), CCET, Bhilai from 18th July to 23rd July 2020.
- 6. One week Online Faculty Development Programme on "A Hands on Introduction to Engineering Simulation Using Finite Element Analysis" conducted by Department of Mechanical Engineering, Vidya Vihar Institute of Technology, Purnea from 19th July to 23rd July 2020.

- 7. One day Webinar on "**Robotics & Its Future**" conducted by Department of Electronics and Instrumentation Engineering (Centre of Excellence in Robotics) in association with Sak-Robotics Lab Pvt. Ltd, IIT Bhubaneswar on 29 June 2020.
- 8. Five-Day Online Faculty Development Programme on "Recent Pedagogy and ICT Tools in Teaching & Research" from August 27-31, 2020, NIT Uttarakhand.

# **PUBLICATIONS**

### **Conference Papers:**

- 1. **Kailash Kumar Borkar** and M K Singh, "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.
- 2. **Kailash Kumar Borkar**, Vijay Tiwari, Piyush Tiwari, M.K. Singh "*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.
- 3. Piyush Tiwari, Mukesh Kumar Singh, **Kailash Kumar Borkar**, Vijay Tiwari "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.
- 4. Vijay Tiwari, Piyush Tiwari, **Kailash Kumar Borkar**, M.K. Singh "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.

### **Journal Papers:**

- 1. **Kailash Kumar Borkar,** Piyush Tiwari, Vijay Tiwari, "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
- 2. Piyush Tiwari, **Kailash Kumar Borkar**, Vijay Tiwari, "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.
- 3. Vijay Tiwari, Piyush Tiwari, **Kailash Kumar Borkar**, "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.

# **ADMINISTRATIVE RESPONSIBILITIES in Past**

- 1. Assistant Examination Superintendent at Institute Level for University (CSVTU) Exam during 2015-2016.
- 2. Assistant Examination Superintendent in other exam like PSC, UPSC, SSC, NTPC etc.
- 3. UG Project Coordinator at Institute level during 2014-2016.
- 4. Coordinator in University (CSVTU) Youth Festival at Institute level during 2015-2016.
- 5. Admission Coordinator 2015-2016...
- 6. Laboratory Prof. In-charge for Material Testing Lab at Department level.
- 7. Time Table In-charge at Department level.

#### ADMINISTRATIVE POSITIONS AND RESPONSIBILITIES at GGV

- 1. Working as Member, Board of Study, Department of Industrial & Production Engineering.
- 2. Working as coordinator, AICTE activities, School of Studies in Engineering & Technology.
- 3. Working as coordinator alumni, School of Studies in Engineering & Technology.
- 4. Working as In-charge, Time Table, Department of Industrial & Production Engineering.

#### COMPUTER/SOFTWARE PROFICIENCY

- 1. Three months Certificate Course in Information Technology and Enable Services.
- 2. MS-Office
- 3. C, C++
- 4. MATLAB (Mathematical Programming Language and Optimization).
- 5. AutoCAD, ANSYS, CATIA Design software.

#### **DECLARATION**

I hereby declare that the above information is correct up to my knowledge and I bear the responsibility for above mentioned particulars.

KAILASH KUMAR BORKAR