

Cellphone : 8939934561

e-Mail ID : panchu81@gmail.com

Address : 23, Mettu Street, Butt Road, St. Thomas  
Mount, Chennai. PIN:600 016



## Present Position

Assistant Professor, Department of Industrial Engineering, College of Engineering Guindy, Anna University, Chennai from October-2009.

## Present Additional Responsibility

- > Deputy Controller of Examination, ADDITIONAL CONTROLLER OF EXAMINATION, Anna University, Chennai from July-2018.

## Previous Additional Responsibility

- > , , Anna University, Chennai.

## Other Employment

- > Industrial Engineer, AVTEC Limited for 1 year.
- > Lecturer, Kongu Engineering College for 1 year.

## Degree

- ❖ M.E. in INDUSTRIAL ENGINEERING , College of Engineering Guindy, Anna University (2006 - 2008).
- ❖ B.E. in PRODUCTION ENGINEERING , Government College of Engineering, Coimbatore, Bharathiar University (2000 - 2004).

## Research Degree

- ❖ Ph.D. in Multi-Robot Systems, Optimization from Faculty of Mechanical Engineering, College of Engineering Guindy, Anna University (2010 - 2019).  
Title: Multi-Objective Optimization of Multi-Robot Task Allocation for Foraging and Non-Foraging Tasks.

## Area of Specialisation

- > Optimization, Operations Scheduling, Multi-robot Systems, Swarm Intelligenc

## Membership in Professional Organization

- > OPERATIONAL RESEARCH SOCIETY OF INDIA,(Life Member:1016/K/13/ML)

## Research Guidance

Number of M.E./ M.Tech. Projects : 6

Guided

Number of M.E./ M.Tech. Projects : 1

Guiding

## Papers Published in Journals

Research Papers Published in International Journals : 3

Research Papers Published in National Journals : 0

1. K. Padmanabhan Panchu, M. Rajmohan, R. Sumalatha, R. Baskaran, " Route Planning Integrated Multi Objective Task Allocation for Reconfigurable Robot Teams Using Genetic Algorithm", Journal of Computational and Theoretical Nanoscience, published by American Scientific Publishers. Vol. 15, Issue 2, pp. 627-636
2. Manisha.S, Mohana Krishna.M.N, Amutha.B, Padmanabhan Panchu.K, "Implementation of Lean Tool to Improve Productivity in Automotive Component Assembly Line", International Journal of Engineering, Science and Mathematics, published by International Journal of Multi-disciplinary Resear. Vol. 6, Issue 6, pp. 50-58 (2017).
3. K. Padmanabhan Panchu, M. Rajmohan, R. Sundar, R. Baskaran, "Multi-objective Optimisation of Multi-robot Task Allocation with Precedence Constraints", Defence Science Journal, published by DRDO. Vol. 68, Issue 2, pp. 175-182 (2018).

## Papers Presented in Programmes

Research Papers Presented in International Programmes : 1

Research Papers Presented in National Programmes : 3

1. "Open Job Shop Makespan Minimization - A Heuristic " presented in a National level conference on Third National Conference on Management Science and practice, organised by IIM Ahamadabad, India from 22-Mar-2008 to 24-Mar-2008.
2. K. Padmanabhan Panchu, Dr. T. Paul Robert, "Improved Genetic Algorithm for Non Pre Emptive Ope" presented in a International level conference on International Conference on Advances in Industrial Engineering Applications, organised by College of Engineering Guindy, India from 06-Jan-2010 to 08-Jan-2010.

3. K. Padmanabhan Panchu, M. Rajmohan, M. Rajaganapathy, "Simultaneous localization and mapping using multiple mobile robots and infra red range sensors" presented in a National level conference on Recent Trends in Manufacturing Technology, organised by College of Engineering Guindy, India from 16-Mar-2015 to 17-Mar-2015.
4. "Simultaneous localization and mapping for Multiple Mobile Robots" presented in a National level conference on Exhibition on Education, Science Technology and Innovation, organised by Anna University, India from 24-Jan-2016 to 26-Jan-2016.

### Sponsored Projects Completed

1. "SELF LOCALIZATION AND PATH PLANNING OF MULTIPLE MOBILE ROBOTS USING HYBRID APPROACHES" (April-2014 - March-2015). Project Cost: 50000.00.
2. "SIMULTANEOUS LOCALIZATION AND MAPPING OF A MOBILE ROBOT IN SEARCH AND RESCUE OPERATION" (February-2014 - August-2014). Project Cost: 25000.00.
3. " Minimizing the Sensor Noise in Mobile Robot Navigation Using Multiple Sensors Data Association " (March-2015 - October-2015). Project Cost: 25000.00.
4. "Centralized Path Planning and Decentralized Navigation in unknown Environment for Multi-Robot Scenario" (August-2015 - August-2016). Project Cost: 1.00.
5. "Coordinated Path Planning for Multiple Mobile Robots" (March-2016 - September-2016). Project Cost: 25000.00.

### Programme Chaired

1. Co Chairman, International level conference titled "International Conference on Advances in Industrial Engineering Applications" conducted by College of Engineering Guindy from 06-Jan-2014 to 08-Jan-2014.

### Programme Organized

1. COORDINATOR, National level workshop on "Applications of Metaheuristics For Engineering Optimization" from 20-Mar-2012 to 21-Mar-2012.
2. Coordinator, National level workshop on "Data Analysis" from 22-Mar-2013 to 23-Mar-2013.
3. Coordinator, National level Short Course on "Value Added Course on Basics of Machine Learning Using Python" from 29-Jul-2017 to 26-Aug-2017.

### Programme Attended

1. Participated in a National level workshop on "Sensor Integration and Data Acquisition in Robotics" organized by IIT Madras and IIITD&M Kancheepuram., India from 21-May-2010 to 22-May-2010.
2. Attended a National level Short Course on "Robotics and Robot Applications " organized by IIT Madras and IIITD&M Kancheepuram., India from 21-Jun-2010 to 26-Jun-2010.

3. Participated in a National level workshop on "Swarm Robotics" organized by Technophilia and SRM university, India from 02-Sep-2010 to 03-Sep-2010.
4. Participated in a National level workshop on "econtent Development Skills For teachers" organized by Anna University, India from 15-Sep-2010 to 15-Sep-2010.
5. Attended a International level Short Course on "Supply Chain Management" organized by College of Engineering Guindy, India from 24-Sep-2010 to 25-Sep-2010.
6. Attended a National level Short Course on "Multi Criteria Decision Making" organized by College of Engineering, Guindy, India from 08-Oct-2010 to 09-Oct-2010.
7. Participated in a National level workshop on "Research Methods" organized by Anna University, India from 19-Feb-2011 to 20-Feb-2011.
8. Attended a National level Short Course on "Staff Development Program Computational Intelligenece for Modelling and Optimization of Manufacturing System" organized by Bannari Amman Institute of Technology Sathyamangal, India from 06-Jun-2011 to 18-Jun-2011.
9. Attended a National level seminar on "Optimal Path Planning For Mobile Robot in Dynamic Environment- A Classic And Metaheuristic Approach" organized by Kongu Engineering College Sponsored by DRDO, India from 06-Jan-2012 to 07-Jan-2012.
10. Attended a National level seminar on "Issues in Preparing Research Thesis and Project Propossal" organized by College of Engineering Guindy, India from 16-Mar-2012 to 17-Mar-2012.
11. Attended a National level seminar on "Optimization in Engineering and Management" organized by College of Engineering Guindy, India from 24-May-2012 to 25-May-2012.
12. Participated in a National level workshop on "Multi-Criteria Decision Making" organized by Anna University, India from 26-Mar-2013 to 27-Mar-2013.
13. Participated in a National level workshop on "Innovation and Enterpreneurship Skills" organized by Anna University, India from 18-Apr-2013 to 18-Apr-2013.
14. Participated in a level workshop on "Design and Development of Robot" organized by Inventrom Robotic Institute, Goa, India from 24-Jun-2013 to 06-Jul-2013.
15. Participated in a National level workshop on "SAKSHAM-IT Champion Training Program" organized by Anna University and Microsoft, India from 15-Dec-2014 to 20-Dec-2014.
16. Attended a National level Short Course on "Advances in Databases and Data Mining" organized by College of Engineering Guindy, Anna University, Chennai, India from 16-Feb-2015 to 01-Mar-2015.
17. Participated in a National level workshop on "CNC Machines and Robotics" organized by Department of Manufacturing Engineering, College of Engineering Guindy, India from 15-Jun-2015 to 19-Jun-2015.
18. Attended a National level Short Course on "CS6601-Distributed Systems" organized by Madras Institute of Technology, India from 27-Nov-2015 to 01-Dec-2015.

19. Attended a National level Short Course on "CS6601-Distributed Systems" organized by Madras Institute of Technology, India from 18-Dec-2015 to 19-Dec-2015.
20. Participated in a National level workshop on "Change Management and Capacity Building to Improve Quality of Service" organized by Anna University, India from 23-Feb-2016 to 23-Feb-2016.
21. Participated in a National level workshop on "Student Evaluation and Question Paper Setting" organized by National Institute of Technical Teachers Training & Research, India from 21-Sep-2016 to 23-Sep-2016.
22. Attended a National level Short Course on "Instructional Management and Institutional Development" organized by NITTTR Chennai, India from 08-Jul-2017 to 19-Jul-2017.
23. Participated in a National level workshop on "Universal Human Values" organized by CEG, Anna University, India from 21-Feb-2018 to 21-Feb-2018.
24. Participated in a National level workshop on "Quality Assurance in Higher Education Institutions" organized by Internal Quality Assurance Cell, Anna University, India from 13-Mar-2018 to 13-Mar-2018.

### Invited Lectures

1. Delivered a Lecture on "Purchase Management" in PG Programme in Industrial Engineering organized by National Productivity Council, Chennai (18-Feb-2010).
2. Delivered a Lecture on "Simultaneous Localization, Mapping and Path Planning" in DST Sponsored Seminar on Evolutionary Humanoid Robotics organized by Kongu Engineering College, Perundurai (31-Oct-2015).
3. Delivered a Lecture on "JIT and KANBAN Systems" in FDTP on Production Planning and Control organized by College of Engineering Guindy Campus, Chennai (02-Dec-2015).
4. Delivered a Lecture on "Value Stream Mapping" in One Day Workshop on Lean Manufacturing organized by MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY , Puducherry (05-Mar-2016).
5. Delivered a Lecture on "Basics of Reliability Engineering" in RNTBCI-CSR-Training Programme organized by Department of Manufacturing Engineering, Anna Univ, Chennai (24-Nov-2016).
6. Delivered a Lecture on "Reliability Improvement and Growth Models" in RNTBCI-CSR-Training Programme organized by Department of Manufacturing Engineering, Anna Univ, Chennai (19-Dec-2016).
7. Delivered a Lecture on "An Introduction to Taguchis Design of Experiments" in RNTBCI-CSR initiative Training programme organized by Department of Manufacturing Engineering, Anna Univ, Chennai (27-Dec-2016).
8. Delivered a Lecture on "A Star Algorithm for Path Planning" in Mobile and Autonomous Robots Course organized by VIT University, Vellore (28-Apr-2017).

9. Delivered a Lecture on "Introduction and hands-on to Raspberry Pi platform" in Summer School on IoT organized by School of Computing Sciences, Hindustan University, Chennai (19-Jun-2017).
10. Delivered a Lecture on "Introduction to path planning and multi-room task allocation" organized by VIT University, Vellore (28-Mar-2018).
11. Delivered a Lecture on "Fault Tree Analysis" in Training program offered by Maxwell Centre For Industrial Training & Development organized by Sundram Fasteners Ltd, Vellappanchavadi, Chennai (14-Sep-2018).