

FACULTY PROFILE



Faculty Name:	Dr. N.N. PRABOO
Qualification:	M.E., M.B.A., Ph.D., Ph.D., Instrumentation Engineering, Annamalai University, 2015 M.E., Process Control and Instrumentation Engineering, Annamalai University, 2008 MBA., Human Resource Management, Annamalai University, 2005 B.E., Electronics & Instrumentation Engineering, Annamalai University, 2000
Designation and Department:	LECTURER, INSTRUMENTATION AND CONTROL ENGINEERING
Mail Id:	praboonn@gmail.com
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Profile Description:	Lecturer, (Deputed) Department of Instrumentation and Control Engineering, Dr. Dharmambal Government Polytechnic College for Women, CIT Campus, Tharamani, Chennai. – May 2017 till date. Assistant Professor, Department of Electronics and Instrumentation Engineering, Annamalai University, Annamalainagar, 2005- 2017 Instrumentation Engineer, Co-generation Power Plant, EID Parry (India) Limited, Nellikkuppam, 2003-2005 CAD Engineer and Graphics Designer, CADD Centre, Dindigul, 2002 - 2003 Software Engineer, Programming & Web Development, APT Software, Puducherry, 2000-2001
Area of Expertise:	Process Control and Instrumentation, Fractional order System and Controllers

Achievements:

- **Placement and Training Officer**
Dr. Dharmambal Government Polytechnic College
2021 to till date
- **Institution Internship Coordinator**
Dr. Dharmambal Government Polytechnic College
2021 to 2024
- **Manager, Institution Industry Interaction Cell (IIIC)**
Dr. Dharmambal Government Polytechnic College
2021 to till date
- **Member in Various Organizing Committees**
Dr. Dharmambal Government Polytechnic College
2017 to till date
- **Acted as Project Coordinator, Project Supervisor**
Department of Instrumentation and Control Engineering
Dr. Dharmambal Government Polytechnic College
2017 to till date
- **Ph. D Research Supervisor,**
Department of Electronics and Instrumentation
Engineering, Annamalai University
2016 to till date
- **Acted as Project Guide,**
M.E., Process Control and Instrumentation (PC&I),
Department of Electronics and Instrumentation
Engineering, Annamalai University till 2017.
- **Reviewer and Editorial Member** in many International
Journals.
- Acted as **Additional Chief Superintendent (ACS)** for
Board Examination and GTE, DOTE till 2017.
- **Flying Squad Member,** Board Examinations, DOTE
- Acted as **Coordinator** for Central Valuation and GTE
valuation, DOTE
- **Author of books** in the domains of Process Control
Instrumentation, Environmental Sustainability and Green
Energy, Robotics and Automation, Neural Networks, etc.

	<ul style="list-style-type: none"> ➤ Coordinator in conduction of Faculty Development Program, Short-Term Training Program and Workshop, Annamalai University till 2017. ➤ Coordinator in NBA, NAAC, IQAC Annamalai University till 2017. ➤ Acted as Resource Person for conducting Contact Classes and Labs for various programs in Directorate of Distance Education, Annamalai University. ➤ Obtained Swayam Online Course Certification for the courses <ul style="list-style-type: none"> • Art of C Programming (4 credit) – Sep 2020 • Digital Electronics and Microprocessor (2 credit) – Feb 2022. ➤ Conducted a course on ARDUINO as coordinator under Canada India Institution Cooperation Project (CIICP), 2019 ➤ Invited as Guest speaker for various Conferences, Workshops, Faculty Development Programs and Chapters ➤ Conducted E-Webinar on “மாற்றம் என்பது சொல் அல்ல செயல்” on 1st August 2020. ➤ Conducted E-Quiz on topics GK Quiz Visual, I(Q)uiz, Visual Quiz, Tronics Quiz, 2020 ➤ Acted as TNEA Counsellor, DOTE, 2019
<p>Publications:</p>	<p>International Journal Publications:</p> <ul style="list-style-type: none"> ❖ V. Velmurugan, M. Venkatesan, N. N. Praboo, Analysis and Performance Validation of CRONE Controllers for Speed Control of a DC Motor, International Journal of Robotics and Control Systems Vol. 2, No. 2, 2024, pp. 558-580 ISSN 2775-2658. ❖ V. Velmurugan, N. N. Praboo and K. Ramash Kumar, Performance Evaluation of Composite CRONE Controller Strategy for an Air Pressure System, Hindawi Mathematical Problems in Engineering Volume 2023, Article ID 99336.23; 15 pages

- ❖ Velmurugan, V & Praboo, NN 2021, **Energy Efficient Composite CRONE Control Strategy for a Mechanical Active Suspension System**, Journal of Green Engineering (JGE), vol. 11(2), Feb., pp. 1587-1606.
- ❖ Velmurugan, V & Praboo, NN 2020, **CRONE control methodology for a Mechanical Active Suspension System**, Journal of Mechanics of Continua and Mathematical Sciences (JMCMS); vol. 15(10), Oct.1 pp. 1-19.
- ❖ Velmurugan, V & Praboo, NN 2020, **Non Integer Robust Controllers for Speed Control of a DC Motor**, Journal of Seybold Report, vol.15(9), Sept., pp. 2015-2025.
- ❖ Velmurugan, V & Praboo, NN 2020, **Real Time Implementation of Third Generation CRONE Control Strategy for Air Pressure System**, International Journal of Recent Technology and Engineering (IJRTE), vol. 8(6), March., pp. 1107-1112.
- ❖ Velmurugan, V & Praboo, NN 2020, **CRONE Control Strategy for Air Pressure System**, International Journal of Innovative Technology and Exploring Engineering (IJITEE), vol. 9(6), April, pp. 966-971.
- ❖ N.N,Praboo, P.K.Bhaba, **Real Time Implementation of New Hybrid Non Integer Order Control Strategy in DC Motor Speed Control System**-International Journal of Engineering Trends and Technology (IJETT)- ISSN: 2231- 538199-104 September 2016 Volume 39 Issue 2.
- ❖ N.N.Praboo, P.K.Bhaba, **Real Time Implementation of Third Generation CRONE Control Strategy for DC Motor Speed Control System**- International Review of Automatic Control (IREACO) ISSN: 1974-6059 15-22 January .2014 Volume 7 Issue 1.
- ❖ N.N.Praboo, P.K.Bhaba, **Simulation results on Implementation of CRONE Control Strategies in a Speed Control of a DC Motor**, ARPN Journal of Engineering and Applied Sciences ISSN: 1819- 6608 817.

- ❖ N.N.Praboo, P.K.Bhaba, **Simulation work on Fractional Order PI^λ Control Strategy for speed control of IDC motor based on stability boundary locus method**, International Journal of Engineering Trends and Technology ISSN: 2231- 5381.3403- 3409 August 2013 Volume 4 Issue 8

International Conferences:

- ❖ Velmurugan, V., and Praboo, N.N., (2020), **Certain Investigation on CRONE Control Strategy for Air Pressure System**, AICTE sponsored International Conference on Smart Computing and Control of Systems [ICSCCS-2019], Sree Vidyanikethan Engineering College, Tirupati, Andhra Pradesh, October 2019.
- ❖ Velmurugan, V., and Praboo, N.N., (2020), **Design and Simulation of First and Second-Generation Crone Controllers in a DC Motor Speed Control System**, 4th International conference on Bioenergy, Environment & Sustainable Technologies - BEST2019, Arulnai Engineering College, Tiruvannamalai, Tamilnadu., January, 2019.
- ❖ N.N.Praboo, P.K.Bhaba, (2014), **Design and Implementation of Third Generation CRONE Controller in a Spherical Tank System**, 8th International conference on Intelligent Systems and Control Coimbatore India 147-152 10-11 January 2014 IEEE Victoria University Australia, CSIR, CSI
- ❖ N.N.Praboo., P.K.Bhaba, (2010), **Fractional Order PI^λ Control Strategy for a Liquid Level System**, 2nd International conference on world congress on Nature and Biologically Inspired Computing Kitakyushu, Japan 121-126 15-17 December 2010 IEEE Kitakyushu University Japan

National Conference:-

- ❖ N.N.Praboo, **Integration of Fault Detection and Diagnosis with control of a CSTR Process**, National Symposium on Instrumentation (NSI-33)- Vishakhapatnam, Andhra Pradesh 123-124 8-10 December 2008 NIS Andhra University.

Books Published:	<ul style="list-style-type: none"> • Advancement in Industrial Instrumentation & Control System, by Dr. N. N. Praboo, <i>Vinsa Publishing</i>, ISBN:978-8196809645, January 2024. • Robotics and Automation in Mechanical Engineering by Dr. N.N.Praboo, Dr. K.Muthukumar, Dr. R. Manikandan, Dr. L.Thillai Rani, <i>Cosmos Scientific Publications</i>, ISBN:978-81-19359-33-2. October 2023. • Environmental Sustainability and Green Engineering by Dr. N. N. Praboo, Dr. N. Abilash, Dr. V. Muthuraman, Dr. M. Kumaresan, Dr. Veeravilli Suryanarayana, <i>Cosmos Scientific Publications</i>, ISBN: 978-8119359417. March 2023. • Artificial Neural Networks, by Dr. N.N.Praboo, Dr. P. Shylaja, <i>Archers & Elevators Publishing</i>, ISBN: 9789394958821, March 2023
Professional Membership:	<ul style="list-style-type: none"> ➤ Member in International Association of Engineers (IAENG)-146070 ➤ Member in Indian Science Congress Association LSO(AM)163
Course Contents and Laboratory Manual Prepared:	<p>Couse Contents: Advanced Process Control, Computer Communication Networks, Measurement of Process Variables</p> <p>Lab Manuals: Process Control Instrumentation Lab, Computer Aided Drafting Lab, PLC and MATLAB Practical, Simulation Lab, Microprocessor & Microcontroller Lab</p>
Soft Skills:	<p>Software: MATLAB, LabVIEW, PicoSoft, OrCAD Pspice, Edraw, AUTOCAD</p> <p>Programming: C / C++, Java, Arduino IDE, Microprocessor / Microcontroller, FPGA, VHDL, Visual Basic, HTML, PHP, MySQL, Oracle</p> <p>Control Devices Programming: DCS, SCADA, PLC, HART</p> <p>Photo & Video Edit, Animation: Photoshop, Corel Draw, Maya, 3D Animation, Flash</p> <p>Other Editing tools: PageMaker, Ms Project, Ms Office, Flash</p>