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Designation: STA
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Areas of experience:

- Automotive Electronics
- Embedded System Design
- Microprocessor in Automation
- Precision Engineering and Instrumentation

Research interests:

- Automotive Electronics and Engine control
- Mechatronic System Design
- Robotics
- Active Control Systems

Courses offered

Microprocessor in Automation

Control System

Mechatronic Systems

Mechanical Measurements

Automotive Electronics

Academic background:

Ph.D (Investigation the control techniques for improving the Idling Speed Control and Air-fuel ratio in S.I.Engine) IIT Madras , Chennai – 36, India	In progress
M.E (Applied Electronics) Anna University , Chennai, India	1996
AMIETE (Electronics and Communication) Institute of Electronics and Telecommunication Engineers, New Delhi, India	1989

Professional experience:

- Institution : IIT Madras, Chennai, India
Designation : STA
Department : Department Mechanical Engineering
- Company : Visteon Power Train Controls, Chennai, India
Designation : Software Design Engineer (SG: 7)

- Company : Caterpillar Inc., Peoria, USA
Designation : Senior Project Engineer

RESEARCH PUBLICATIONS:

1. Manivannan P.V., R.B.Poola, A.Ramesh, and J .B.Dhinagar, “ **Ignition Enhancement in a two- stroke Spark-Ignition Engine** ”, SAE Paper 951780, 1995.
2. Manivannan P.V., R.B.Poola and A.Ramesh, “ **Design and Development of Digital Data Controller for Signal Analysers Used for Internal Combustion Engine Research** ”, Proceedings of the All India Conf. on Applied Instrumentation, Vol.1, pp.176-178, 1992.
3. Manivannan P.V., Y.G.Srinivasa “ **Microcontroller based portable data acquisition system with PC- interface** ”, National Conf. on Instrumentation Society of India, 1994.
4. M. Loganathan, P.V. Manivannan and A. Ramesh, “**Development of a Manifold Injection System for a Small SI Engine**”, SAE Infotronics-2004, Chennai, 2004.
5. Boreddy Balakrishna Reddy, A.Ramesh, P.V.Manivannan and Krishna Vasudevan, “**Studies on an Electronic Governor with a Stepper Motor Actuator for a Diesel Engine**”, Proceedings of the Third International Conference on Automotive and Fuel Technology, New Delhi, 2004.
6. Susthantha Kumar Sarkar, P.V.Manivannan and A.Ramesh, *SAE INDIA 0301002*, “ **An Electronically Controlled System for parametric studies on Fuel Injection in an Automotive Gasoline Engine** ”, Proceedings of the First national conference on Automotive Infotronics, 2003.
7. G.Kannan, K.Vijayan, Dr.S.Subramaniyam and P.V.Manivannan, “**Development of Electric Car**”, Proceedings of National Conference on Advances in Automobile Engineering, pp. 468-476, 1998.

MAJOR SPONSORED & INDUSTRIAL CONSULTANCY PROJECTS:

- Design and development of Electronic Control Unit (ECU) for the Electric Power Steering system (EPS).
- PC Based real time Fuzzy Logic Controller to improve the low speed characteristics of a hydraulic motor.
- Development of PC based real time controller for testing the dynamic behaviour of shock absorbers.
- Technology demonstrator of Active Suspension for Tracked Vehicle.
- Design and development of Electronic Port Fuel Injection System (EPFIS) for two-wheeler Engine.
- Development of Engine Management System (EMS) for Hydrogen fueled multi-cylinder Engine.