

Brief CV

Dr. VIJYANT AGARWAL (Asst. Professor)

Ph. D, M.Tech. (IIT Delhi), B.E. (Mech.)

Mobile 09899308574

Educational Qualifications

- i) Ph.D - *Dynamics and Control of Robotics using softcomputing Techniques (Artificial Intelligence)*

Contribution

Developed and tested a new and more efficient Artificial Intelligence algorithm for Trajectory Control of Robot.

- ii) M.Tech (Design Engineering, full time) from IIT, Delhi with MHRD scholarship.
- iii) B.E. (Mechanical) from M.M.E.C (Govt. Engg. College), Gorakhpur (U.P.) with merit scholarship.

International Activities

- i. Chief-Editor, *International Journal of Manufacturing Science and Engineering*.
- ii. Chief –Editor, *International Journal of Artificial Intelligence*.
- iii. Reviewer, *IEEE Transaction on Instrumentation and Measurement*.
- iv. Reviewer, *International Journal of Computers and Applications by ACTA, Canada*.
- v. *Publication in International Journals and Conferences attended- Annexure*

PhD thesis supervised / under supervision

Mr. Sanjay Gupta “*Softcomputing strategies for Multicriteria Decision making problems*”, Faculty of Technology, Delhi University, Delhi, India, under progress

Job Experience

Total working experience is 15 years in which 05 years is of corporate at managerial level and 10years is of academic and research in NSIT Delhi, Delhi Govt.’s premiere Institute.

Faculty in-charge of Industrial Automation and Artificial Intelligence Lab (The Lab. Developed by the applicant)

Subjects taught by me are Robotics, Artificial Intelligence, Strength of Material, Control and Industrial Engineering.

Founder Coordinator of the turnkey **e-governance project** (with PKI / digital signature) for NSIT, which includes Store & Purchase department, Establishment department, Accounts & Finance department, and Academic department of NSIT.

Public Relation Officer in NSIT.

In the **Escorts Research Center and Escort Construction Equipment Ltd. (Design Department)** experience is as below

- a. **Design & Development of Ergonomics tractor: -**
Layout, detail drawing, vendor development, protobuilding , prototesting & process and assembly sheets for production.
- b. **Design & Development of HYDRA 8 p-n-c crane (Design patented)-**
Design calculations as per ISO formats and documentations, 3D modeling of main structure components, FEA, Layout, detail drawing, vendor development, Proto Building &Proto Testing, process and assembly sheets for production.
- c. **Design & Development of K10 p-n-c Crane- (Design patented)**
Design calculations as per ISO formats and documentations, 3D modeling of main components, FEA ,Layout, detail drawing, Vendor development, Proto Building &Proto Testing, process and assembly sheets for production.
- d. **ISO auditor** and in the implementation team as a manager.
- e. Project Manager for implementation of **ERP software** (Avlone)

Annexure

Publications

International Journals

1. Vijayant Agarwal, A.P. Mittal, and B.C. Nakra, "Design and analysis of clustering algorithm for a redundant manipulator", published in *The International Journal of Computers, Informational Technology, and Engineering*, vol. 1 (2), pp. 53-59, 2007.
2. Vijayant Agarwal, A.P.Mittal, "Mathematical modeling of Machine learning technique for the solution of inverse harmonic non-linear equations" published in *Automation, computers, Applied Mathematics,(International Journal),Vol. 17(2008)*.
3. V. Agarwal, B.C. Nakra and A.P. Mittal, "Inverse Kinematics of Manipulator Using Weighted Fuzzy Clustering Method for Fuzzy Training Data" published in IJAISC (International Journal Artificial Intelligence and Soft Computing, Inderscience vol.1(2/3/4)(2009).
4. V.Agarwal, A.P.Mittal, "Design and Analysis of Weighted Fuzzy Clustering Algorithm for crisp data" accepted in the *INFORMATION, An International Interdisciplinary Journal Indexed by SCIE (Thomson Reuters), JCR, MR, ZM and JDreamII , Vol.12, No.3, 2009*.
5. Neetu Sardana, Vijayant Agarwal ,Pushpa Suri, "Extensible Markup Language (XML) Commutation on non-linear data using conventional and soft computing methods" published in *International Journal of Computing and Application*, July to Dec. 2009.

Conference / Seminar

INTERNATIONAL

1. Vijayant Agarwal, "Path Planning of Redundant Manipulator based on FCM", the 14th International IASTED conference on Robotics and Application, Massachusetts, USA, November 2-4, 2009.
2. Vijayant Agarwal, and A.P. Mittal, "An ANFIS based system for the LSPB trajectory of a redundant planar manipulator" in *the Proceedings of the 25th IASTED International Conference on Modelling, Identification, and Control*, Spain , February 6-8, 2006.
3. Vijayant Agarwal, and Vineeta Agarwal, "Control of robotic manipulators using G.A. & ANN," in *the Proceedings of the 6th International Conference on Cognitive Systems*, New Delhi, India, December 14-15, 2004.
4. Vijayant Agarwal, A.P. Mittal, and B.C. Nakra, " A study of fuzzy logic based inverse kinematics solutions," in *the proceedings of International Conference on*

Computer Applications in Electrical Engineering Recent Advances, Roorkee, Sep. 29-Oct. 1, 2005.

5. Vijayant Agarwal, and A.P. Mittal, "Soft Computing Paradigms for Learning Fuzzy Robotics Controllers", *Proceedings of the 7th International Conference on Cognitive Systems December 14-15, 2005*, New Delhi, India.
6. Neetu Sardana, P.R.Suri, Vijayant Agarwal, "Design and development of algorithm for porting XML data into flexible analysis platform" published in the ninth international conference on management of transformation held in January 3-5, 2008, New Delhi.

NATIONAL

1. Vijayant Agarwal, Gaurav Kappor, "A study of machine vision incorporated with robotic system" in the COMET'04 (National Conference in Mechanical Engineering and Technology) at IT BHU.
2. Vijayant Agarwal, Ganguly Pranav et.al., "Design & Development of real time flexible robotic control interface" in the COMET'04(National Conference in Mechanical Engineering and Technology) at IT BHU.
3. Vijayant Agarwal, and A.P. Mittal "Some issues of the informational paradigms" *in the proceedings of ISTE national conference on Electronics, Communication, Control, Computer Engineering, and Power-Energy*, Gurgaon , India, April 07-08, 2007.
4. Vijayant Agarwal, and A.P.Mittal "Transformation from mathematical modelling to informational paradigm" accepted in the ninth international conference on management of transformation to be held on January 3-5,2008,New Delhi.
5. Vijayant Agarwal, B.C.Nakra and A.P.Mittal "Inverse Differential Motion of Manipulator by Soft Computing Techniques" *published as a seminar paper in faculty development program on soft computing techniques workshop cum seminar* ,organized by MAIT , Rohani, New Delhi.