

Curriculum Vitae

Name: Dr Renu Cheema Vig

Address: House No. 161 Sector 8 Panchkula

Age: 53 years

Email Address: renuvig@pu.ac.in

Phone No:9814126152

Presently working as Director, UIET (University Institute of Engineering and Technology)Panjab University, Chandigarh since 2009.

Academic Awards

- Awarded **Gold Medal** by Panjab University for standing first in B.E. across all departments in Punjab Engineering College and other affiliated colleges of PU
- Awarded Role of Honour for standing third in Pre-Engg. in Panjab University
- Awarded The N K Iyengar Memorial Prize for the paper Fuzzy Modelling for Ignition Timing Control in 2003
- Awarded The Corps of Engineers Prize for the paper Fuzzy Diagnostic System for Coronary Artery Disease in 2005
- **Appreciation letter from Dr M.P.Ravindra ,Vice President and Head,Education and Research Dept.,Infosys Technologies Ltd for Sabbatical Project undertaken at Infosys Technologies Ltd in 2005**

PhD Specialization :Artificial Intelligence and Neural Networks in 1997

Total Experience:More than 31 years

- Guided 7 PhD successfully in the area of Signal Processing and Fuzzy Logic based control
- Supervising six PhD students
- **Research Publications(Annexure 1)**
- **Google Scholar Indexed:112**
- **H Index:10**
- **Scopus Indexed:71**
- **SCI Indexed:25**
- **Visited University of Cambridge,University of Nottingham,University of Birmingham and National University of Singapore.Presented paper in a conference at Imperial College London**
- Administrative experience as Head of Department since 2000 onwards in Technical Teachers' Training Institute and Panjab University
- Member of various committees handling purchase of equipment,recruitment of faculty and staff etc
- Responsible for maintenance,modernization and capacity expansion of laboratories ,revision of curricula and introduction of new courses
- Experience of frequent and meaningful interaction with industry
- Conducted various Faculty Development Programmes sponsored by AICTE,ISTE,Manilla Staff College,Philippines
- Experience of conceiving projects for arranging grants from various agencies such as MHRD,DIT

Work Experience

1. Director in UIET(University Institute of Engg. And Technology), Panjab University Campus since Sept 2009

- University Institute of Engineering and Technology(UIET) was established as On Campus Engineering Institute of Panjab University in 2002 with four under graduate courses. Presently it has 06 under graduate courses and eight post graduate courses
- When I was given charge of Director in 2009 only 4 under graduate programs were AICTE approved. All 06 under graduate programs and 04 post graduate programs got AICTE approval in 2010-11. Presently there are 08 PG programs. Five UG programs got NBA accreditation in 2015 for two years.
- UIET received Rs. 10 crore under TEQIP-II project of MHRD for sub Component 1.1 i.e. Strengthening Institutions to improve Learning outcomes and Employability of Graduates. Since UIET was selected as a well performing institute, additional Grant of Rs. 5 crore has been sanctioned by MHRD.
- Design Innovation Centre has been set up by MHRD at Panjab University in 2015. UIET is the hub for DIC and PEC University of Technology, CSIO-CSIR and Institute of Dental Sciences are the Spokes. Under this project worth Rs. 10 Crore, initiatives are being taken to promote design and innovation culture among students and faculty.
- UIET has also been selected for TEQIP Phase III under which it will receive Rs 7 Crore from MHRD

- Set up Entrepreneurship Cell in UIET in 2012 to mentor students who are interested to establish start-ups.
- MoUs signed with Industry such as Infosys, Spice Digital Limited to motivate students and faculty to take up projects in collaboration with Industry.
- Nuvoton Technology established Microcontrollers lab in UIET.
- Independent Board Member of Modern Diaries Limited, Chandigarh.
- Member Board of Management of Indira Gandhi Delhi Technological University for Women, Delhi.
- Leadership Programs attended:
 - ❖ Building Excellence in Professional Higher Education Institution from Jan 19 to 21,2014 at ISB, Hyderabad.
 - ❖ Management Capacity Enhancement for Administrators from March 10-14, 2014 at IIM Lucknow (Noida Campus).
 - ❖ Leadership Development Programme from Sept 29 to Oct 2, 2015 at NUS Singapore organized by IIM Raipur.

2. Professor in UIET since 2005

- Presently working in the area of Indian Sign Language (Summary attached **Annexure 2**)
- Principal Investigator of UGC assisted Special Assistance Program in the area of Active Noise Control under which Rs 46 Lakhs were received in addition to salary of a Project Fellow .Under this project Semi anechoic chamber has been set up in UIET and various projects are going on in this area in collaboration with NAL Bangalore. (Summary attached **Annexure 3**)

- Co-investigator of the Project Development of Software Protection Tools sponsored by Department of Information Technology,GOI vide which Rs 14 lakhs were sanctioned
- Supervised the Project Modeling and Simulation of Nano Scale MOSFETs at room temperature sponsored by Department of Information Technology vide which Rs 34.50lakhs were sanctioned
- Initiated and established MOU between Panjab University and University of Western Australia under which students of UIET are sent to UWA for summer internship with stipend
- **Interaction with Industry :**
- Single point of contact for Campus Connect initiative vide which UIET has MOU with Infosys Technologies Ltd.
- Project in collaboration with M/s Phillips on improving testing board for Toaster being produced by M/s Phillips.
- Teacher Coordinator for conducting BAJA SAE workshop in collaboration with industries like OEM Technologies, NATRIP,Maruti Suzuki etc.

3. Reader In UIET in the department of Telecommunication and Information Technology from Oct 2003 to Sept 2005

- PhD Research in the area of Neural Networks and Fuzzy Logic based system design
- Developed curricula for Information Technology and Electronics and Communication Engineering Stream
- Developed Lab for Microcontrollers,Database systems,Microprocessor,Digital Electronics,Embedded systems Design
- Administrative jobs like member of Purchase Committees,interview panels.

- Subject coordinator of Computer Architecture and Organisation, Microprocessor, Digital Electronics
- **Undertaken Sabbatical Project on Test evaluation enhancement Processes at Infosys, Mohali for six weeks** for which received Appreciation letter from Dr. M.P. Ravindra, Vice President and Head, Education and Research Department of Infosys.

4. Assistant Professor in Technical Teachers' Training Institute (TTTI, Sector 26, Chandigarh) in the department of Computer Science and Engineering from Nov 1997 to Oct 2000

- Guided PhD Research in the area of-Fuzzy Modeling of Air Fuel Ratio of a Gasoline Engine
- Coordinator of development programmes for teachers of technical institutes in emerging areas such as multimedia ,object oriented programming etc
- Coordinator of two In Country Programmes conducted at TTTI in collaboration with Manilla Staff College, Philippines
- Developed Course Material for ISTE on Fundamentals of Database Management Systems under LM project
- Developed Labs in the following areas:
 - Neural Networks
 - Image Processing
 - Computer Networks
 - Database Systems
- Coordinator of different MHRD projects under which grant of 28 lakhs was sanctioned for creating the following infrastructure
 - Internet Connectivity
 - Web Server
 - Computer Application Laboratory
 - Computer Networks Laboratory

- Consultant to Punjab State Agriculture Development Cooperative Bank for the Computerisation Project

5. Lecturer in Panjab Engineering College, Chandigarh in the department of Electronics and Communication Engineering from Jan 1992 to Nov 1997

- Teaching Assistant in Panjab Engineering College ,Chandigarh in the department of Computer Science and Engineering from July 1989 to Jan 1992 and from Sept 1985 to Dec 1986.
- Taught subjects of Digital Electronics and Advanced Microprocessor to Under Graduate students
- Taught Digital System Design to Post Graduate students
- Research in the area of Artificial Intelligence and Expert Systems

6. Technical Editor in Electronics For You Magazine from Feb 1987 to May 1988

- Editing of Technical Articles
- Testing of circuits published
- Preparing EFY Report
- Designing of PCBs for the projects published

Workshop/STTP/Conference organized/attended:

1. Organized National Conference on Computing, Communication and Control, Oct 23-24, 2009
2. **Attended World Congress on Engineering, Imperial College, London, July 2-4, 2008**
3. Organized National Conference on Emerging Trends in Wireless Communication and E-Security ,Jan 11-12, 2007

4. Organised Workshop on Embedded System Design by Microsoft from July 11 to 14, 2006

5. Organized Microsoft Academic Day on Feb 18, 2006

6. Attended Campus Connect Conclave at Infosys Technologies Ltd, Mysore from Jan 19 to 21, 2006

7. Organized AICTE sponsored STTP on Enhancing Pedagogy with Modern Technologies, Feb 13-24, 2006