



Dr. Dhiraj Sunehra

B.E.(ECE), M.Tech (DSCE), Ph.D. (ECE)

Professor

SMIEEE, MACM, MIETE, MISTE

Electronics & Communication Engineering

Areas of Interest:

1. Digital and Embedded Systems
2. Internet of Things
3. Green Wireless Communications
4. Global Navigation Satellite Systems

Dr. Dhiraj Sunehra has obtained Bachelor's Degree in Electronics and Communication Engineering (ECE) from Chaitanya Bharathi Institute of Technology (C.B.I.T.), Hyderabad in 1997, Master's Degree in Digital Systems & Computer Electronics from Jawaharlal Nehru Technological University Hyderabad (JNTUH) in 2001, and Doctoral Degree in ECE from Osmania University, Hyderabad, India in 2012.

He has over 22 years of teaching and research experience in various reputed organizations including M.G.I.T, NERTU, Osmania University and J.N.T.U. Hyderabad. Dr. Sunehra is working at JNTUH College of Engineering, Jagtial since July 2010, and he is currently Professor of ECE (since July 2016), and Head of ECE Department, since December 2016. He has also been the Head of ECE Department during 2010-12. He has about 73 research publications in various Journals and Conferences. He has delivered 31 invited lectures. He has been a reviewer, and has chaired 14 technical sessions in various IEEE Conferences. He is also the Faculty Coordinator of IETE Student Forum at JNTUHCEJ.

He has contributed in the conduct of various state level entrance exams as an Enforcement officer/ Special Observer, and for result processing as a Confidential Team member. He is the Member of Doctoral Review Committee at JNTUH; Member of Board of Studies at CBIT, GRIET, TKREC, CMRTC, MLRIT, Hyd., and JITS, Warangal; and Governing Council member at MRITS, Hyderabad and Unity PG College, Nalgonda. His research interests include Digital and Embedded Systems, Green Wireless Communications and Global Navigation Satellite Systems. He has guided several student for B.Tech and M.Tech. projects and is guiding seven students for Ph.D. He has participated in 23 weeks of Short-Term Training Programmes sponsored by AICTE / ISTE / DST, India. He has organized various training programmes and symposia for Faculty and Students in the field of ECE. He is a Senior Member of IEEE, Life Member of IETE, Indian Geophysical Union (IGU), Indian Society for Technical Education (ISTE) and Member of Association for Computing Machinery (ACM).

- ▶ Educational & Professional

- ▶ Academic Qualifications

- ▶ Doctor of Philosophy in Electronics & Communication Engineering, University College of Engineering (A), Hyderabad (Osmania University, Hyderabad) with - (2003-2012)

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Master of Technology in Digital Systems & Computer Electronics, JNTUH College of Engineering, Hyderabad (Jawaharlal Nehru Technological University Hyderabad) with First Class (1998-2001)

- ▶

Bachelor of Engineering in Electronics & Communication Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad (Osmania University, Hyderabad) with First Class (1993-1997)

- ▶ Diploma in Electronics & Communication Engineering in Electronics & Communication Engineering, Q.Q. Govt. Polytechnic, Hyderabad (State Board of Technical Education & Training, Hyderabad) with First Class (Distinction) (1988-1992)

▶ Professional Experience

- ▶ Teaching Experience

- ▶ Associate Professor, J.B. Institute of Engineering & Technology, Hyderabad (Affiliated to JNTU Hyderabad) (2009-07-01 - 2010-07-13)

- ▶ Research Scientist, Research & Training Unit for Navigational Electronics, Osmania University, Hyderabad (21-07-2005 - 2008-03-31)

- ▶ Assistant Professor, Mahatma Gandhi Institute of Technology, Hyderabad (Affiliated to JNTU Hyderabad) (1999-01-11 - 2005-07-20)

- ▶ Assistant Professor, Chaitanya Bharathi Institute of Technology, Hyderabad (Affiliated to Osmania University, Hyderabad) (26-08-1997 - 1998-01-17)

- ▶ **At JNTUH**

- ▶ Professor, JNTUH College of Engineering, Jagtial (Jawaharlal Nehru Technological University Hyderabad) (2016 - Till Date)

- ▶ Associate Professor, JNTUH College of Engineering, Jagtial (Jawaharlal Nehru Technological University Hyderabad) (2010 - 2016)

- ▶ **Publications**

- International Journals

- ▶ Dhiraj Sunehra, *Solar Energy Driven Mosquito Repeller System using Arduino Uno*, International Journal of Advanced Research in Engineering and Technology, ISBN No.0976-6480, Vol No.10, Issue No.2, pp.472-481, International Association of Engineering and Management Education (IAEME), India, Mar - Apr, 2019
- ▶ Dhiraj Sunehra, *Smart Phone Based Energy Management System using Raspberry Pi3*, International Journal of Advanced Research in Engineering and Technology, ISBN No.0976-6480, Vol No.10, Issue No.2, pp.463-471, International Association of Engineering and Management Education (IAEME), India, Mar - Apr, 2019
- ▶ Dhiraj Sunehra, *Bluetooth Based Office Automation and Security System using Raspberry Pi and Android Application*, International Journal of Advanced Research in Engineering and Technology, ISBN No.0976-6480, Vol No.10, Issue No.2, pp.449-456, International Association of Engineering and Management Education (IAEME), India, Mar - Apr, 2019
- ▶ Dhiraj Sunehra, *Implementation of a Arduino Based RF Controlled Robot Vehicle System with Road Safety Alert Features*, International Journal of Research and Analytical Reviews, ISBN No.2348-1269, Vol No.6, Issue No.1, pp.280-287, IJRAR, Mar., 2019
- ▶ Dhiraj Sunehra, *Web Based Smart Irrigation System using Raspberry Pi*, International Journal of Advanced Research in Engineering and Technology, ISBN No.0976-6480, Vol No.10, Issue No.2, pp.55-64, International Association of Engineering and Management Education (IAEME), India, Mar - Apr, 2019
- ▶ Dhiraj Sunehra, *Development of a Smart Home Communication and Device Control System using Raspberry Pi3 and NodeMcu*, International Journal of Research and Analytical Reviews, ISBN No.2348-1269, Vol No.6, Issue No.1, pp.1314-1323, IJRAR, Mar., 2019
- ▶ Dhiraj Sunehra, *Implementation of a Smart Fire Management and Gas Leakage Control System with User Alert using Raspberry Pi3*, International Journal of Research and Analytical Reviews, ISBN No.2348-1269, Vol No.6, Issue No.1, pp.202-210, IJRAR, Mar., 2019
- ▶ Dhiraj Sunehra, *Implementation of Home Automation and Security System using Touch Screen, Remote Control and Web Based Operation*, International Journal of Latest Trends in Engineering and Technology, ISBN No.2278-621X, Vol No.9, Issue No.1, pp.105-112, SN Education Society, India, Sep., 2017
- ▶ Dhiraj Sunehra, *TEC and Instrumental Bias Estimation of GAGAN Station Using Kalman Filter and SCORE Algorithm*, Positioning, ISBN No.2150-8526, Vol No.7, Issue No.1, pp.41-50, Scientific Research Publishing, Inc., Feb., 2016
- ▶ A. Vinitha, Dr. M.S.S. Rukmini, Dr. Dhiraj Sunehra, *Energy Management in Clustered Heterogeneous Wireless Sensor Networks- A Study Concept*, International Journal of Modern Engineering Research (Special Issue : NC-DATES2K16), ISBN No.2249-6645, Vol No.-, Issue No.Special Issue : NC-DATES2K16, pp.42-45, IJMER, Jan., 2016
- ▶ Dhiraj Sunehra, *Power Efficient Automated Lighting System using Wireless Sensor Network Approach*, International Journal of Scientific & Engineering Research, ISBN No.2229-5518, Vol No.7, Issue No.6, pp.896-901, IJSER, Jun., 2016
- ▶ Dhiraj Sunehra, *Real Time Vehicle Tracking on Google Maps using Raspberry Pi Web Server*, International Journal on Recent and Innovation Trends in Computing and Communication, ISBN No.2321-8169, Vol No.4, Issue No.6, pp.325-330, Auricle Technologies Pvt. Ltd., India, Jun., 2016
- ▶ Dhiraj Sunehra, Thirupathi Samudrala, K. Satyanarayana, M. Malini, *Physiological Signals and Vehicle Parameters Monitoring System for Emergency Patient Transportation*, International Journal of Research in Engineering and Technology (Special Issue: ICNBMS-2015), ISBN No.2319-1163, Vol No.4, Issue No.7, pp.30-35, eSAT Publishing House Pvt. Ltd., India, Jun., 2015
- ▶ Dhiraj Sunehra, *Computation of Various Ionospheric Constraints at GPS Operating Frequency Bands*, International Journal of Scientific & Engineering Research, ISBN No.2229-5518, Vol No.5, Issue No.6, pp.372-376, IJSER, Jun., 2014
- ▶ Dhiraj Sunehra, *Fingerprint Based Biometric ATM Authentication System*, International Journal of Engineering Inventions, ISBN No.2278-7461, Vol No.3, Issue No.11, pp.22-28, IJEI, Jun., 2014
- ▶ Dhiraj Sunehra, *Estimation of Prominent Global Positioning System Measurement Errors for GAGAN Applications*, European Scientific Journal, ISBN No.1857-431, Vol No.9, Issue No.15, pp.68-81, European Scientific Institute, May, 2013
- ▶ Dhiraj Sunehra, *Prominent Ambiguity Resolution Methods For TEC Estimation Using GPS Data*, International Journal of Engineering Research and Technology, ISBN No.2278-0181, Vol No.2, Issue No.5, pp.559-564, ESRSA Publications Pvt. Ltd., India, May, 2013
- ▶ Dhiraj Sunehra, *Data Acquisition Experiment using NovAtel Dual Frequency GPS Receiver*, International Journal of Engineering Research and Technology, ISBN No.2278-0181, Vol No.2, Issue No.5, pp.521-526, ESRSA Publications Pvt. Ltd., India, May, 2013
- ▶ Dhiraj Sunehra, *Real-Time Estimation of Ionospheric Delay using Dual Frequency GPS Observations*, European Scientific Journal, ISBN No.1857-431, Vol No.9, Issue No.15, pp.36-50, European Scientific Institute, May, 2013
- ▶ Dhiraj Sunehra, *Validation of Algorithms for Datum Transformations and Map Projections*, International Journal of Scientific & Engineering Research, ISBN No.2229-5518, Vol No.4, Issue No.6, pp.376-381, IJSER, Jun., 2013
- ▶ Quddusa Sultana, Dhiraj Sunehra, Vemuri Satya Srinivas, Achanta Dattatreya Sarma, *Effects of Pseudorange Positioning on DOP in LAAS*, Positioning, ISBN No.2150-8526, Vol No.1, Issue No.1, pp.18-26, Scientific Research Publishing, Inc., Nov., 2010

- ▶ **Administrative Positions Held**

- ▶ Head of ECE Department, JNTUHCEJ, 26 Dec 2016 - Present
- ▶ Head of ECE Department, JNTUHCEJ, 13 Sep 2010 - 27 Sep 2012

Contact :

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