# Dr. Hima Bindu Valiveti

#### **Areas of Interest**

Computer Networks, Wireless Communications and Networks, Signal Processing, Analog and Digital Communications, Probability Theory and Stochastic Processes, AI based signal processing.

#### Education

Ph.D., GITAM (Deemed to be University), 2018 ME, RMIT University, Melbourne, Australia, 2005 B Tech, JNTU Hyderabad, 2002

#### **Academic/Industrial Experience**

- 1 Professor, Electronics and Communication Engineering GRIET, Sep 2018-Present
- 2 Research Scholar, GITAM (Deemed to be University), and 2012-2018
- 3 Assistant Professor, Electronics and Communication Engineering, GRIET, June2011-Sep 2018
- 4 Associate Professor Electronics and Communication Engineering, SVIT, Hyderabad March 2010- June 2011
- 5 Associate Professor, Electronics and Communication Engineering, RRS College of Engineering and Technology, July 2007- Feb. 2010
- 6 Manual Test Engineer for Hermis Precisa Australia, Melbourne, Victoria, Australia, April 2004-June 2007

#### **Publications (Selected)**

- 1. Koduru, A., Valiveti, H. B., & Budati, A. K. (2020). Feature extraction algorithms to improve the speech emotion recognition rate. International Journal of Speech Technology, 23(1), 45-55.
- 2. **Valiveti, H. B.**, & Kumar, B. A. (2020). Handoff strategies between wireless fidelity to light fidelity systems for improving video streaming in high-speed vehicular networks. International Journal of Communication Systems, e4285.
- 3. Budati, A. K., & Valiveti, H.B. (2019). Identify the user presence by GLRT and NP detection criteria in cognitive radio spectrum sensing. International Journal of Communication Systems, e4142.
- 4. **Valiveti, H. B.**, & Polipalli, T. R. (2019). Performance analysis of SLTC-D2D handover mechanism in software-defined networks. International Journal of Computers and Applications, 41(4), 245-254.
- 5. Suseela, R. S. U., Murthy, K. S. N., & Valiveti, H. B (2019). Performance Analysis of Cross-layer Efficient Selfishness Prevention Routing Protocol for the Dynamic CR Networks. International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-9S3

- 6. Padidam Nikhila, **Valiveti, H. B**, R S Uma Suseela, Ch Pratyusha Chowdari (2019). Improved Selection of Separate V2v Communication Assets for Lte, SInternational Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 8958, Volume-8 Issue-6
- 7. **Valiveti, H. B.** (2018). Energy efficient handover mechanism for device to device communication in a framework based on software defined networking principles.
- 8. **Valiveti, H. B.**, & Polipalli, T. R. (2018). Hierarchy-based knapsack approach for network selection in HetNets. *International Journal of Computer Aided Engineering and Technology*, 10(5), 599-608.
- 9. Valiveti, H. B., & Rao, P. T. (2017). EHSD: an exemplary handover scheme during D2D communication based on decentralization of SDN. *Wireless Personal Communications*, 94(4), 2393-2416.
- 10. Nakirikanti, Pavan Kumar, and **Valiveti, H. B.** "Automatic Measuring and Recompense System for Monitoring Health Management Process For Automobiles." *IJSEAT* 2.8 (2014): 286-291.

#### **International Conferences attended**

- 1. Swetha, N., Chaitanya, D. L., **Valiveti, H.B**, & Kumar, B. A. (2019, August). Malicious User Detection in Cooperative Sensing Environment Using Robust Distance. In International Conference on Inventive Computation Technologies (pp. 104-114). Springer, Cham.
- 2. Valiveti, H. B., & Polipalli, T. R. (2017, October). Light fidelity handoff mechanism for content streaming in high speed rail networks. In 2017 8th IEEE Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON) (pp. 488-492). IEEE.
- 3. Valiveti, H. B., & Polipalli, T. R. (2016, June). D2D Handoff Mechanism based on SDN principles in Proceedings of the 2016 ISSE Conference on Large Scale Multi-disciplinary Systems of National Significance (LAMSYS) ISSE Sriharikota-Chennai Chapter and Satish Dhavan Space Center SHAR, ISRO June 24th & 25th 2016

#### **Reviewer (Selected)**

- 1 Wireless Personal Communications (WPC), Springer
- 2 International Journal of Intelligent Engineering Informatics (IJIEI), Inderscience Publishers
- 3 International Journal of Pervasive Computing and Communications (IJPCC), Emerald Publishing
- 4 Optimal Control, Applications and Methods, Wiley publisher, John Wiley & Sons Ltd

#### **Workshops attended (selected)**

- 1. Machine learning for Signal Processing and VLSI (05-08 June 2020), Centre for Artificial Intelligence and Machine Learning, Department of Electronics and Communication Engineering, Anurag university, Hyderabad, India
- 2. One Week Online AICTE Recognized Faculty Development Programme on Technological Interventions using Wireless Communication (18-22 May 2020), organized by Electronics and Communication Engineering Department NITTTR, Chandigarh.
- 3. One week FDP on Moodle (LMS) organized by Dr. G Y Patrikar College, MGM University, Aurangabad in association with Spoken tutorial IIT Bombay.
- 4. Participated in MoodleMoot India 2018 conference (29-30 November 2018), Central University, Hyderabad, India.
- 5. AICTE approved FDP201X on Pedagogy for Online and Blended Teaching-Learning Process one month in 2018
- 6. AICTE approved FDP101X on Foundation Program in ICT for Education one month in 2018
- 7. Two weeks training on LABVIEW at GRIET by NI in 2016
- 8. ET601Tx: Educational Technology for Engineering Teachers a course of study offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay (07 January 07 March 2016)
- 9. AICTE approved two months Technical Communication workshop facilitated by IIT Bombay (October 2015-December 2015)
- 10. AICTE approved, IIT Bombay conducted Two-week ISTE STTP on Signals and Systems, July 2015
- 11. WHS791x: Technical Communication for Scientists and Engineers a course of study offered by IITBombayX, an online learning initiative of Indian Institute of Technology Bombay (8 October 18 November 2015)
- 12. IIT Kanpur workshop on Detection theory for communications and signal processing, October 2015
- 13. Analog Electronics (Remote workshop by IIT Kharagpur), November 2013
- 14. Aakash for Education (Remote workshop) conducted by IIT Bombay, November 2012

# **Workshops conducted (selected)**

- 1 Coordinator for FDP on Recent trends in Computer Architecture, VLSI and Embedded Systems, 8 June 2020 to 13 June 2020
- 2 Challenge ACI, a nationwide Hackathon, October 2018 and 2019
- 3 Case Study based Workshop on IOT and Machine Learning, February 2018
- 4 MATLAB to HDL, March 2017
- 5 Building your own App using Arduino, January 2017
- 6 Embedded systems workshop using TivaC, Orbit Boost, December 2016
- 7 Advitiya 2016, Share Your Projects and Ideas under ISF-IETE, September 2016
- 8 Estimation theory for Signal Processing & Cognitive Radio Networks, October 2015

#### **Awards**

- 1 Qualified in Faculty Eligibility Test (FET) under JNTU-H, 2013
- 2 Top 5% in NPTEL course on Principles of Signals and Systems, IIT Kanpur, 2017
- 3 Appreciation certificate from Police Communications Organization, TSPA for lectures delivered to SCT PC/SI (Communications) undergoing basic induction training (2017-18, 2018-19)

# **Funding**

### **Consultancy**

1. Name of the funding agency: All India Council for Technical Education (AICTE)

**Subject:** To organize conference in online mode under the scheme Grant of Conference (GOC)

**Title of Conference:** International Conference on Advances in Communications,

Computing and Embedded Systems

**Role:** Coordinator

Amount granted: Rs. 1,48,667/-

**Date of Conference:** 18-19 September 2020

2. Name of the funding agency: Ample Auto Tech Pvt. Ltd.

**Objective:** Research proposal titled "Performance Evaluation of the Reliability of Vehicle Suspension system using Software Applications, Cloud and Machine Learning algorithms"

**Role:** Principal Investigator

**Amount Funded:** Rs.24,18,000/- for a period of five years is quoted.

**Starting Period**: January 2020