

RESUME

Mr. A. MAHESH BABU

Email: maheshbabu07402@gmail.com

OBJECTIVE

To build career with a leading organization managed by committed and dedicated professionals, which will help me to explore my knowledge in the field with a challenging work environment.

ACADEMIC PROFILE

YEAR of STUDY	COURSE	NAME of INSTITUTION	BOARD/ UNIVERSITY	% of MARKS SCORED
2020-*	Ph.D (Pursuing)	JNTUK, Kakinada	JNTUK, Kakinada	---
2012-14	M.Tech, (Radar & Microwave)	Andhra University College Of Engineering(A)	Andhra University	9.30(CGPA)
2007- 11	B.Tech.,(ECE)	Lakireddy Balireddy College of Engineering	JNTUK	77.85
2005-07	INTERMEDIATE	Gowtham Junior College	Board of Intermediate Education	93.50
2004-05	SSC	Z.P. High School	Board of Secondary Education	87.33

EXPERIENCE

- Pursuing Ph.D. at JNTUK, Kakinada.
- Presently working as Assistant Professor in GVP College for Degree and PG Courses(A), Rushikonda from September 24, 2015 to till date.
- Worked as Assistant Professor in LENDI college from May 4th to September 23rd 2015.

TECHNICAL SKILLS

Software's known: MATLAB, Xilinx Vivado, Multisim, CCS Studio

RESEARCH PUBLICATIONS

1. M. B. Ammisetty and M. Ramarakula, "Outage Probability and Diversity Analysis of STAR-RIS-Assisted RSMA Systems with CLT, CF, and MF Models over Nakagami-m Fading Channels", Engineering Research Express, 2026. **(ESCI, IF 1.8, Q2 Journal)**
2. M. B. Ammisetty, "FIRES-integrated NOMA networks in interfering environments: ergodic capacity and outage characterization", Engineering Research Express, 2026. <https://iopscience.iop.org/article/10.1088/2631-8695/ae6994>, **(ESCI, IF 1.8, Q2 Journal)**
3. Ammisetty, M.B., Ramarakula, M. Channel estimation strategies for STAR-RIS-Aided NOMA: robustness to imperfections and complexity trade-offs for 6G wireless systems. Sci Rep (2026). <https://doi.org/10.1038/s41598-026-49013-0> **(SCI, IF 4.8, Q1 Journal)**

4. Presented a paper on "Optimized Pilot Reuse and Beamforming for STAR-RIS-NOMA Using a Bounded Multi-Source Shortest Path Framework", in 2nd IEEE International Conference on Intelligent Systems in Engineering, Secured Systems & Cybersecurity, April 09-10, 2026 (SCOPUS) <https://ieeexplore.ieee.org/abstract/document/11542622>
5. M. B. Ammisetty and M. Ramarakula, "Ergodic capacity analysis of multi-user STAR-RIS-NOMA systems over Nakagami-m fading under hardware impairments," Engineering Research Express, 2026. <https://iopscience.iop.org/article/10.1088/2631-8695/ae4a74> (ESCI, IF 1.6, Q2 Journal)
6. "Robust Outage Characterization of STAR-RIS NOMA Under Nakagami-m Fading: Curve Fitting, Central Limit and Convolution Approaches", Arabian Journal for Science and Engineering. 09 Sep 2025, <https://doi.org/10.1007/s13369-025-10643-7> (SCI-Q1 Journal IF 3.2).
7. Presented a paper on "Coverage Performance Analysis of STAR-RIS-Aided NOMA and MIMO-NOMA Networks", in International conference on Recent Developments in Electronics and Communication Systems (RDECS-2025), Aditya University, Surampalem, Andhra Pradesh, India, August 29-30, 2025, Springer. (SCOPUS)
8. "Ergodic capacity analysis of STAR-RIS-NOMA over Nakagami-m fading channel with imperfect-CSI, inter-cell interference and SIC", Results in Engineering, Volume 27, 2025, 106106, ISSN 2590-1230, <https://doi.org/10.1016/j.rineng.2025.106106>. (ESCI, Q1 Journal with IF 9.2).
9. "Reinforcement Learning-Based Power Allocation Optimization for Ergodic Rate Maximization in STAR-RIS-Aided NOMA Systems", in Taylor & Francis, CRC Press on 20th February, 2025. (SCOPUS). <https://doi.org/10.1201/9781003593034>
10. "Design and verification of 16 & 32-Bit CPUS using ARM architecture", in Taylor & Francis, CRC Press on 19th September, 2024. (SCOPUS) DOI: [10.1201/9781003616399-7](https://doi.org/10.1201/9781003616399-7)
11. "Massive MIMO Receiver Design with Channel State Information", Journal of Physics: Conference Series, Volume 2571, 2nd International Conference on Artificial Intelligence, Computational Electronics and Communication System (AICECS 2023) 16/02/2023 - 17/02/2023 Manipal, India, <https://iopscience.iop.org/article/10.1088/1742-6596/2571/1/012035> (Scopus).
12. Published a paper on "**Performance analysis of Reconfigurable intelligent surface in wireless communications**" in International Journal of Innovative Research in Computer and Communication Engineering on 4th April, 2023
13. "**COVID-SAFE: IoT Based Health Monitoring System using RFID in Pandemic Life**" 2021 IEEE International Conference on RFID Technology and Applications (RFID-TA), 6-8 October 2021 (IEEE Explore).
14. "**Massive MIMO Receiver Design with Channel State Information**", Design Engineering, ISSN: 0011-9342, 2021. (SCOPUS)
15. "Classification of High Dimensional Data Using Filtration Attribute Evaluation Feature Selection Method of Data mining", ICEECOT on 13th, 14th December 2019 organized by GSSS Institute of Engineering & Technology for Women. (IEEE Explore).
16. 'Performance Analysis of STBC Channel Coding Techniques for LTE Advanced Systems' International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 7 Issue IV, Apr 2019
17. "Performance Analysis of Phased Array, MIMO and Phased -MIMO Radars", International Research Journal of Engineering and Technology (IRJET), Volume: 05 Issue: 03, Mar-2018.

18. "Jacobian Matrix Based Channel Estimation Algorithm for B3G Cellular Communication Systems", International Journal of Engineering Sciences Research(IJESR), Vol 07, Special Issue, January 2016, ICMEET-2015.
19. "MAF Application for separation of fast and slow fading", NECICASPC-2K15,13th-14th july,2015
20. "Analysis of Rayleigh PDF/CDF using real time mobile phone received data", ESPACE, IEEE Co-Sponsored Conference dated Feb 20-21,2015, pp:17 (**IEEE Explore**).
21. "Validation of Rayleigh PDF/CDF using real time mobile phone received data", IEEE "EESCO-2015", dated Jan 24-25, pp:924-927 (**IEEE Explore**).
22. "Mobile radio propagating channel characterization and its performance analysis", IEEE "EESCO-2015", dated Jan 24-25,2015(**IEEE Explore**).
23. "GPS receiver SPS accuracy assessment using LS and LQ estimators for precise navigation", 11th IEEE India conference "INDICON-2014", dated December 11-13, 2014, PP:65-66. (**IEEE Explore**).
24. "Performance evaluation of standard positioning service GPS receiver with LS and LQ estimators over southern region of Indian sub-continent", IEEE "ICSEMR-2014", dated Nov 27th -29th ,2014, PP:12. (**IEEE Explore**).

PATENTS

- "A Compact Slotted Patch Antenna with Defected Ground Structure for Multiband Millimeter-Wave 5G Systems." Application No.: **202641021591**, published under the **Indian Patent Office** (Ordinary Application), published on **06th March, 2026**.
- "A Multiband circular polarized Low-Profile Planar Spiral Antenna with Coaxial Feed for Satellite Communication Systems", Application No.: **202641014195**, published under the **Indian Patent Office** (Ordinary Application), published on **20th Feb, 2026**
- "Multistage Test-Framework for Digital Circuits", Application No.: 202641050720, published under the **Indian Patent Office** (Ordinary Application), published on **01st May, 2026**

FDP/STTP/WORKSHOPS ATTENDED

- Successfully participated & completed Faculty Development Program on **Next Generation Signal Processing and Wireless Communication: AI&ML Perspective** at Lendi Institute of Engineering and Technology(A) from 09/03/2026 to 14/03/2026.
- Attended One Week Professional Development Program on Recent Advances in Signal Processing Organized by IEEE BVRIT HYDERABAD Student Branch under IEEE BVRITH SPS Chapter in association during 24st-28th November 2025.
- Successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **AI&ML Applications in Next-Gen Wireless Communications of 5G & 6G** at BVRIT HYDERABAD COLLEGE OF ENGINEERING FOR WOMEN from 06/10/2025 to 11/10/2025.
- Got Top 2% Certificate for Twelve Weeks **NPTEL FDP Course** on "Data science for Engineers" from july 2025 to October 2025.
- Attended Faculty Development Program on "**Standardization and Conformity Assessment**" from 19-08-2025 to 21-08-2025 organized by Bureau of Indian standards in Association with AU College of Engineering, Andhra University, Visakhapatnam.

- Attended Online Faculty Development Program on **"Reconfigurable and Compact Antennas: Enabling Real Time Solution in Wearable and Healthcare Technologies"** from 21-07-2025 to 26-07-2025 organized by Rajalakshmi Engineering College, Chennai.
- Successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Outlook On Best Practices And Strategies For Chip Design Implementation - From Industry Perspective** at Gayatri Vidya Parishad College For Degree And PG Courses from 16/12/2024 to 21/12/2024
- Got Elite-Silver Certificate for Twelve Weeks **NPTEL FDP Course** on "Cloud Computing" from July 2024 to October 2024.
- Got Elite-Silver Certificate for Eight Weeks **NPTEL FDP Course** on "Introduction to Internet of Things" from April 2024 to May 2024.
- Got Elite-Silver Certificate for Four Weeks **NPTEL FDP Course** on "Electronic Waste Management" from April 2023 to May 2023.
- Attended Online Workshop on **"VLSI to System Design: Silicon to end Application Approach"** from 31-07-2023 to 04-08-2023 organized AICTE, New Delhi.
- Attended Online Faculty Development Program on **"AI/ML for Computer and Medical Image Analysis Applications"** from 25-03-2023 to 05-04-2023 organized by E&ICT Academy, NIT Warangal and St. Peters Engineering College.
- Attended Online Workshop on **"Full-Custom and Semi-Custom Design Flows Using Cadence Tools"** from 25-07-2022 to 29-07-2023 organized by GVP College of Engineering(A)
- Attended Online Faculty Development Program on "Cognitive Radio, Antennas & Millimeter Wave Communication" from 07-06-2021 to 11-06-2021 organized by SARANATHAN COLLEGE OF ENGINEERING.
- Attended Online Advanced FDP on "IOT in 5G Technology" from 21-06-2021 to 25-06-2021 at Silicon Institute of Technology.
- Attended Online Faculty Development Program on "Antenna Design and Analysis using FEKO" from 22.06.2020 to 24.06.2020 organized by GAYATRI VIDYA PARISHAD COLLEGE FOR DEGREE AND PG COURSES (A), Visakhapatnam.
- Successfully Completed Online STTP on "Internet of Things and its Applications in Industry" organised by Ramrao Adik Institute of Technology Nerul, Navi Mumbai from 08.06.2020 to 12.06.2020.
- Attended "ICT Based Teaching And Learning" an Online FDP Conducted by Sharanabasaveshwar College of Arts, Kalaburagi, Karnataka from 03-06-2020 to 07-06-2020.
- Attended "Artificial Intelligence" an Online FDP conducted by Gayatri Vidya Parishad College for Degree and PG Courses(A) from 22-05-2020 to 26-05-2020.
- Attended "Outcome Based Education Software" an ONLINE FDP conducted by Vmedulife Software Services on 28-05-2020.
- Attended Online Faculty Development Program on "Cyber Security" organized by Department of Computer Science and Engineering of Swarnandhra College of Engineering & Technology in Association with Indian Servers during 15th & 16th May 2020.
- Attended "Advance Research Methodology and Innovative Teaching Pedagogy" an Online FDP Conducted by Tulsiramji Gaikwad Patil College of Engineering and Technology from 08-05-2020 to 13-05-2020.
- Attended "MATLAB Project Course on Massive MIMO, Cooperative Communication and Cognitive Radio for 5G" organized by Andhra University, Department of ECE, Visakhapatnam from 06-01-2020 to 11-01-2020.
- Got Certificate for two months NPTEL FDP Course on "EVOLUTION OF AIR INTERFACE TOWARDS 5G" from November 2019 to April 2020.

- Got Certificate for three months NPTEL FDP Course on “CONTROL ENGINEERING” from July 2019 to October 2019.
- Attended one-week FDP on “**RF Antenna Design for EMC Applications**” conducted by NIT Warangal and GITAM University from 28-01-2019 to 02-02-2019.
- Participated in a workshop on **Python Programming** at **GVP College of Engineering** from 21st May to 30th May 2018.

RESEARCH NETWORKS

- Member of **IAENG** (Member Number: 234114).
- Member of **IFERP** (Member Number: **PMIN52987061**).
- Total number of citations-42, hindex-3, i10 index-2 (As per Google Scholar records).
- Reviewer for IEEE Transactions on Vehicular Technology Journal.

ACADEMIC ACHIEVEMENTS

- Have subject knowledge on Signals and Systems, Digital Signal Processing, Control Systems, Microwave Engineering, Probability Theory and Random Processes, Optical Fiber communications and Wireless Communications.
- **Ratified** as Assistant professor by Andhra University.
- Qualified in the **UGC NET 2014,2015,2018,2019** examination as Assistant professor
- Qualified in the **GATE2012,2013,2014,2015, and 2017**.
- Qualified in **APRCET-2018** and selected for Ph.D admission in JNTU Kakinada.
- Class Topper in B.Tech.
- Stood Andhra university 3rd in M.Tech.

PROJECTS

- Guided 12 B.Tech. Projects.

M.TECH:

Title: Performance Analysis of wired and Wireless Communication Systems

Duration: 1 year

Software Requirements: MATLAB

B. TECH:

Title: NLMS Algorithm for Adaptive Filters

Duration: 6 months

Software Requirements: MATLAB

PERSONAL PROFILE

Father's Name:	A. Chennakesava Rao
Gender :	Male
Nationality :	Indian
Languages Known :	English, Telugu
Permanent Address :	S/O A.Chennakesava Rao D.No:26-105 Venkata Krishna Puram, Pedakakani, Guntur Dist Andhra Pradesh-522509.

DECLARATION

I hereby declare that all the information provided above about me is true up to my knowledge.

Place: Visakhapatnam

Date: 12.07.2025

(A. Mahesh Babu)