


Faculty Name	Anand S. Gudnavar		
Department	Computer Science & Engineering		
Experience in Years	17 Years		
Designation	Assistant Professor		
Qualification	M.Tech (Ph.D)		
Area of Interest	WSN, Embedded Systems, Data Aggregation Algorithms		
Email ID	anand.gudnavar@gmail.com	Mobile No.	9886432683
Address	Department of CSE, JCER , Udyambag, Belagavi.		

EDUCATION:

- 12/2014 - **Registered for Ph.D. in Electrical Engineering, Visvesvaraya Technological University, Belagavi. Submitted thesis in June'2022(waiting for reviewers' comments)**
- 9/2004-8/2006 **Visvesvaraya Technological University, Belagavi. MTech, VLSI Design & Embedded Systems (CGPA „A“ 8.19/10)**
- 8/1999-8/2003 **KLES College of Engineering and Technology, VTU B.E., Electronics and Communications (72%)**

TECHNICAL SKILLS:

- Languages: C, C++, VHDL, Verilog, python, Tcl, Shell scripting, ARM embedded-C
- Systems: LINUX, UNIX, Windows
- Tools: Xilinx, Keil, Arduino
- Assembly Languages: Intel 8086, 8085, 8051
- Typesetting tool: LaTeX, LyX
- Network Simulators: ns2, ns3

EXPERIENCE:

**Work Experience: 14 years (Teaching)
3 years (IT Industry)**

Teaching Experience:

Aug 2022 – Present JCER, Belagavi

- Working for Computer Science and Engineering Department as Assistant Professor.
- Handling subject DSDV.

Aug 2017- July 2022 MMEC, Belagavi

- Worked for Electronics and Communication Engineering Department as Assistant Professor.
- Handled varied subjects like Verilog, ARM, Embedded systems, Computer Organization, CCN.
- College Training and Placement Officer since 2019.
- Other responsibilities like Mentorship Coordinator, Seminar Coordinator,

Aug 2016- Apr 2017 SCET, Belagavi

- Worked for Computer Science and Engineering Department as Assistant Professor and HoD.
- Responsible for academic and administrative establishment in the department.
- Handle varied subjects related to Microprocessors, Analog and Digital Electronics.
- Responsible for developing core team to maintain network (LAN, WiFi), QPDS (VTU exams), system maintenance.

Nov 2015- Aug 2016 VSMIT, Nipani

- Worked for Electronics and Communication Department as Assistant Professor.
- Handled varied subjects related to Microprocessors, Microcontroller, Field Theory
- Established ARM Lab through ARM University Program, first in North Karnataka.
- Coordinator for IIT-B e-Yantra Robotic Lab.
- Conducted workshop for students on C for Placement.

Aug 2009- Nov 2015 KLESCET, Belagavi

- Worked for Electronics and Communication Department as Assistant Professor.
- Handled varied subjects related to Computer Networks, Operating System, C++, Embedded Systems, Microprocessors, Microcontroller, Data structures, Basics of Computer Application.
- Coordinator for WIPRO UTLP Lab and IIT-B e-Yantra Robotic Lab.
- Conducted Workshop on LyX for faculties of KLE and GIT, MMEC and PG students.
- Regularly conduct workshop for students on C for Placement.

Sept 2003-Aug 2006 KLESCET, Belagavi

- Worked for Telecommunication Dept. as lecturer.
- Took varied subjects related to programming like VHDL, 8086, C, System Programming.
- Was in-charge for setting up the VHDL lab for Telecommunication Engineering Department.
- During this tenure did Masters from VTU Belagavi.
- Worked for one year as full-time faculty and two years as part-time.

Industry Experience:

May 2017-Aug 2017 Ostrich Software Solution, Belagavi.

- Worked as Technology Architect
- Responsible for setting up Arduino lab.
- Developed various sketches to be used to train the students for Arduino boards.

May 2006-May 2009 Mascon Global Limited, Bangalore, Client: UTStarCom, Evolving Systems

- Worked for project „Linux HA” as **Development Engineer** for UTStarcom.
- Implementing the SNMP based Sub-Agent part of the HA. Subagent is a „C” code.
- Unit and integration testing the subagent.
- Linux based project. Got more knowledge about the internals of UNIX based system.
- Worked for project „MTN SA” as Development Engineer based on the product “Tertio”, a Provisioning System.
- Responsible for the “Activation Designer” part of project. Based on Tcl based logic.

RESEARCH AREA

1. Wireless Sensor Networks
2. Data aggregation Algorithms
3. Embedded Systems

PATENTS

1. Title: *A Methodology and System to detect the passing of vehicles through one way lanes using remote sensors*
Application No: 202041008977 A
Publication: The Patent Office Journal No 10/2020 Dated 06/03/2020 (patent pending)

PUBLICATIONS

1. Anand Gudnavar and Dr. N Manjanaik, “*Novel Framework for Enhancing Data Quality using Data Correlation Factor in Wireless Sensor Network*”, International Journal of Computing and Digital System (Scopus-Q4), August 2021.
2. Anand Gudnavar and Dr. N Manjanaik, “*IF-MAC: Improved Funneling MAC for Wireless Sensor Network*”, Science and Technology Journal, Jan 2022, Vol 10, issue 1, pp: 49:55, doi: 10.22232/stj.2021.09.02.01 (UGC-Care Journal).
3. Anand Gudnavar and Dr. N Manjanaik, “*Importance of Distortion Function for the Reconstruction of Original Observations from the Estimates in Wireless Sensor Networks*”, Journal of Electronics and Communication Systems, Vol 6. No. 1, April 2021, pp:26-32.
4. Anand Gudnavar and Dr. N Manjanaik, “*A Survey on Energy-Efficient MAC Protocols for Wireless Sensor Networks.*” In: K V S., Rao K. (eds) Smart Sensors Measurements and Instrumentation. Lecture Notes in Electrical Engineering, vol 750. Springer, Singapore. Doi:10.1007/978-981-16-0336-5_16
5. Muskan Peerzade, Alkiyasafeen Khan, Vidya Ghadi, Asmita Patil, Anand Gudnavar, “*Review on Sensor Based Smart Alert System*”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol-10, No-6, June 2021, pp-1972-1979
6. Sanket Hosalli, Shivanad Bhosale and Anand Gudnavar, “*Survey Of MediaTek Chipsets For Various Cores*”, Journal of Electronics and Communication Systems, Vol 3. No. 1, August 2018, pp:1-11
7. Sagargouda Patil, Anand Gudnavar and Chandan K, “*Energy Efficient and Reliable Routing in densely distributed WSN*”, International Conference on Communications Systems, Computing and IT applications, 07-08 Apr 2017. IEEE Conference, doi: 10.1109/CSCITA.2017.8066563, ISBN Information: Electronic ISBN: 978-1-5090-4381-1. Print on Demand(PoD) ISBN: 978-1-5090-4382-8
8. Anand Gudnavar, Rajashekhara, “*Exploring an Effectiveness & Pitfalls of Correlational-based Data Aggregation Approaches in Sensor Network*”, International Journal of Wireless and Microwave Technologies(IJWMT), Vol 7, No.2, March 2017, pp:44-56, doi: 10.5815/ijwmt.2017.02.05., ISSN:2076-1449 (Print),ISSN:2076-9539 (Online)
9. Sagargouda Patil, Anand Gudnavar “*Prolonged Network Lifetime to Reduce Energy Consumption Using Cluster Based Wireless Sensor Network*”, International Conference on Smart Computing and Informatics (SCI), 03-04 Mar 2017. Springer SIST Conference, doi: 10.1007/978-981-10-5544-7_50, Print ISBN : 978-981-10-5543-0, Online ISBN: 978-981-10-5544-7
10. Tushar Diggewadi , Shubhangi Patil, Noor Md Khan and Anand Gudnavar, “ *Customized Door Lock System*”, International Advanced Research Journal in Science, Engineering and Technology, Vol 4, Issue 2, February 2017, pp:37-42, doi: 10.17148/IARJSET.2017.4209. ISSN: Online: 2393-8021, Print: 2394-1588
11. Noor Md Khan, Shubhangi Patil, Tushar Diggewadi and Anand Gudnavar, “*Cinch and Sterling Analog Circuits for Laboratory*”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, Vol 6, Issue 1, January 2017, pp:51-58, doi: 10.15662/IJAREEIE.2017.060100, ISSN: Online: 2278-8875, Print: 2320-3765
12. Shubhangi Patil, Noor Md Khan, Tushar Diggewadi and Anand Gudnavar, “*Soldier Tracking and Health Monitoring System Using GSM/GPS*”, International Journal of Advance Research in Management Engineering Technology, Vol 1, Issue 5, October 2016, pp:260-266. ISSN: 2456-2998
13. Keerti Naregal and Anand Gudnavar, “*Introduction of Embedded Computing System Course at First Year Level in Engineering Education*”, International Advanced Research Journal in Science, Engineering and Technology, Vol 2, Issue 8, August 2015, pp:50-52, doi: 10.17148/IARJSET.2015.2812, ISSN: Online: 2393-8021, Print: 2394-1588
14. Anand Gudnavar, Dr. Balakrishna R and Keerti Naregal, “*Leach-Ex Protocol - A Comparative Performance Study*

And Analysis With Leach Variants Of Wireless Sensor Networks”, National Conference on Frontiers and Advances in Information, Science and Technology, 23-24 May 2013, RRCE Bangalore, ISBN :978-762-05-0050-7

15. Keerti Naregal and Anand Gudnavar, “*Improved Cluster Routing Protocol for Wireless Sensor Networks through Simplification*”, International Conference on Advanced Computing and Communications, 14-16 Dec 2012, Wipro Technologies, Bangalore, doi: 10.1109/ADCOM.2012.6563576, ISBN:9781479908028, IEEE Catalog Number: CFP12ADC-POD

MEMBER OF PROFESSIONAL BODY

1. Life Member ISTE, membership number LM 104311.
2. Life Member Internet Society, membership number 202042.

ONLINE COURSES COMPLETED

1. “*Introduction to Supervised and Unsupervised Machine Learning*” Self-paced course by Simplilearn in July 2022.
2. “*Programming with Python: Introduction for Beginners*” Self-paced course from upGrad, in June 2022.
3. “*Artificial Intelligence in the Real World*” Self-paced course from upGrad, in June 2022.
4. “*Linear Algebra for Analysis*” Self-paced course from upGrad, in June 2022.
5. “*MATLAB Onramp*”, Self-paced training course from MathWorks Training Services, on February 13, 2021.
6. “*Coursera Administrator Training*”, from Coursera.org on July 15, 2020
7. “*Hardware Modeling Using Verilog*”, An eight week course offered by NPTEL Online Certification, from August-October 2018, with a consolidated score of 76%.
8. “*Learn to Program: The Fundamentals*”, A six week course offered by Prof. Jennifer Campbell, University Of Toronto from Coursera.org on Jan 08, 2014
9. “*Computer Networks*”, A twelve week course offered by Prof. David Wetherall, University of Washington from Coursera.org on Oct 07, 2013

CONFERENCES, WORKSHOPS ATTENDED, CONDUCTED AND COORDINATED

1. Attended a one-week AICTE sponsored STTP on Signal Processing and Applications using Machine Learning from 13th to 18th September 2021, at UBDCEDavanagere.
2. Conducted a workshop on “*Arduino Programming and its Application*” for Diploma students, on 6th February 2019.
3. Conducted a workshop on “*IoT Hands-On Session*” for PG students of KLEDRMSSCET, on 16th January 2019.
4. Coordinated a Two day Workshop on Mobitics -An Android based Robotics, from 11th to 12th April 2018, at MMEC, Belagavi.
5. Participated in a Two days National level FDP on “*E-Resources and ICT in Teaching and Research*”, from 14th to 15th February 2018 at MMEC, Belagavi.
6. Attended a one day seminar on “*ARM CORTEX M3 MICROCONTROLLERS*”, on 11th November 2017, at SGBIT, Belagavi.
7. Delivered a talk on Arduino for students of the ECE department on 9th Nov 2017.
8. Delivered a Guest Lecture on Microcontroller 8051 for Diploma students of MLB Polytechnic, Belagavi on 31st August 2015.
9. Participated in one week Programme on “*HR Intervention in Organization Development*”, from 26th July to 1st August 2015 at KLECET Belagavi.
10. Conducted a workshop on C for placement for final year students of EC Dept., from 21st to 23rd July 2015.
11. Conducted a workshop on LyX for the PG students and faculty in MMEC, Belagavi on 9th May 2015.
12. Conducted a workshop on LyX for the final year students of EC dept., in JCE Belagavi on 23rd April 2015.
13. Conducted a workshop on LyX for the final year students of EC dept., in KLECET Belagavi on 23rd March 2015.
14. Delivered a Guest Lecture Series on Microcontroller and its applications for the students of Mechatronics Engineering

Dept. of MLB Polytechnic, Belagavi from 12th to 14th March 2015.

15. Participated in Two day workshop on “Introduction to Robotics” on 6th-7th February 2015 held at IIIT Bangalore.
16. Conducted a two day workshop on Embedded Design on Linux Platform for M.Tech. Students of KLECET Belagavi on 19th and 20th January 2015
17. Attended a one day workshop on “Professionalism”, on 16th January 2015 at KLECET Belagavi.
18. Participated in a FDP on “Mathematical and Computational Applications in Engineering” from 5th to 9th January 2015 at KLECET, Belagavi.
19. Conducted a workshop on Embedded Systems for Diploma students of MLB Polytechnic, Belagavi on 20th August 2014.
20. Conducted a workshop on Embedded Systems for Diploma students of MLB Polytechnic, Belagavi on 28th August 2013.
21. Attended a three day workshop on “Simulation of Wired and Wireless Networks” held at Department of CSE, NITK, Surathkal, Mangalore from 17th to 19th June 2013.
22. Participated in two day ISTE Workshop on AKASH for Education by IIT, Bombay on 10th and 11th Nov 2012.
23. Attended a National level workshop on Simulation of Advanced Wireless Networks Using NS-2 from 20th to 22nd Sept. 2012 at Kongu Engineering College, Perundurai, Erode.
24. Attended a five days UTLP Training Programming by WIPRO at Bangalore from 10th 14th Sept. 2012.
25. Conducted a Workshop on LyX Document Processor from 24th to 25th July 2012 at GIT, Belagavi.
26. Attended a two week ISTE Workshop on “Introduction to Research Methodology” held at AITM, Belagavi from 25th June to 04th July 2012.
27. Conducted a one day workshop on LyX on 22nd June 2012, at KLESCET, Belagavi.
28. Attended a 3 day workshop on Low Power Embedded Systems Using MSP430 at MSRIT, Bangalore from 30th Aug to 01st Sept 2010.
29. Attended a 5 days seminar on Wireless Sensor Networks And Applications from 27th – 31st Jan 2010 at BVB Hubli.
30. Attended a 5 days MISSION 10X Programme from 18th to 22nd Jan 2010 at VTU, Belagavi.
31. Attended a 3 day workshop on SciLab and Applications from 21st – 23rd Dec 2009 at KLESCET, Belagavi.
32. Attended a 5 days seminar on Wireless Networks from 14th to 18th Dec 2009 at VTU, Belagavi.
33. Presented a seminar on “Advancement in 3G” in East West College in Sept 2008.