FACULTY PROFILE

DUDLA PRABHAKAR
S/O D.P.RAMU,
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Gunadala, Vijayawada-04

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https://www.scopus.com/authid/detail.uri?authorId=57193933622
Web of science:
https://www.webofscience.com/wos/author/record/AAD-9875-2021
Google scholar:
https://scholar.google.co.in/citations?user=Zi7pWVQAAAAJ

Educational Qualifications:

Qualification	University	Institute	% of Marks	Year of Passing
PhD (Antennas) (ECE)	Andhra University	AUCE (A)	--	2017
M.Tech (Radar & microwave engineering) (ECE)	Andhra University	AUCE (A)	69.52	2003
B. Tech (E.C.E)	Acharya Nagarjuna University	S.V.H. College of Engineering, Machilipatnam	60.56	2001
Intermediate	Board of Intermediate, A.P.	Sri. Kakatiya junior College, vijayawada	65.99	1997
S.S.C	Board of Secondary Education, A.P.	Prathibhaniketan, vijayawada	70.33	1995

GATE Qualification: Qualified in GATE-2001.

Total teaching Experience: 21 Years

COLLEGE NAME	DESIGNATION	DURATION
Gudlavalleru Engineering College	Associate Professor	01-06- 2018 to Till date
DVR &Dr HS MIC College of technology.	Professor	1-11- 2017 to 31-05-2018
DVR &Dr HS MIC College of technology.	Associate Professor	1-4- 2012 to 31-10- 2017
SRK institute of technology.	Associate Professor	1-10-2010 to 31-03- 2012
SRK institute of technology.	Assistant professor	25-09-2008 to30-06-2010
NIMRA college of engineering and technology.	Assistant professor	1-10-2004 to 24-09-2008

Patents:

1. A patent titled **"Advanced metasurface superstrate structure for improvement of antenna performance"** submitted to Intellectual Property India, Government of India on 27-08-2021 with application No. 202141038830 and **GRANTED** on 30-11-2023.

2. A patent titled **"Integrated optical MEMS serially coupled double racetrack resonator based accelerometer and high Q factor photonic crystal microring-resonator based pressure sensor."** submitted to Intellectual Property India, Government of India on 7-09-2021 with application No. 202141040452 and ***GRANTED*** on 09-06-2023.

3. A patent titled **"Advance and high Sensitive Photonic Crystal Mach-Zehnder-Interferometer Based Pressure-Sensor"** submitted to Intellectual Property India, Government of India on 25-10-2021 with application No. 202141048718 and **GRANTED** on 08-05-2024.

4. A patent titled **" transmission gate buffered full adder circuit for high-performance computing and method of operating the same "** submitted to Intellectual Property India,

Government of India on 15-06-2024 with application No. 202441046350 and **PUBLISHED** on 21-06-2024.

Consultancy:

Consulting project completed on title "Design of Hexagonal-Triangular Combinatorial Structure Based Dual-Band Circularly Polarized Patch Antenna" with worth of Rs.40,500/- for the SAK INFORMATICS.

REAEARCH PUBLICATIONS: 35

SCI, ESCI & Web of Science Indexed Journals: 07

[1] **D. Prabhakar** et.al " Flat Window Filter based Sparse Fast Fourier Transform Architecture Design for MIMO-OFDM Communication System" IETE Journal of Research (T&F), ISSN / eISSN: **0377-2063 / 0974-780X** Published online: 23 Feb 2025, https://doi.org/10.1080/03772063.2024.2441303 , **(SCIE, IF-1.3)**

[2] D.Prabhakar et.al " The Synthesis of Elliptical antenna array using Hybrid SSWOA Algorithm ", Applied Computational Electromagnetics Society (ACES JOURNAL), Vol.38, no.5 pp.309-315, ISSN: 1054-4887 May,2023, , https://doi.org/10.13052/2023.ACES.J.380503 **(SCIE, IF-0.7)**

[3] **D.Prabhakar, et.al,** "Integrated optical MEMS serially coupled double racetrack resonator based accelerometer", Optik - International Journal for Light and Electron Optics, Volume 236, 166583, ISSN: 0030-4026, June, 2021, https://doi.org/10.1016/j.ijleo.2021.166583. **(SCI, IF-6.9)**

[4] D.Prabhakar, et.al, "A High Q-factor Photonic Crystal Microring-resonator based Pressure Sensor." Photonics and Nanostructures - Fundamentals and Applications, Volume 43, 100870, ISSN: 1569-4410, February, 2021 https://doi.org/10.1016/j.photonics.2020.100870, **(SCIE, IF-2.5)**

[5] **D.Prabhakar** et.al "A Hybrid Approach on Metamaterial-Loaded Fractal Antenna Design," Applied Computational Electromagnetics Society (ACES JOURNAL), Volume 35, Issue 9, Pp.1022-1029, September 2020, ISSN: 1054-4887, https://doi.org/10.47037/2020.ACES.J.350907 **(SCIE, IF-0.7)**

[6] **D.Prabhakar** et.al "Side lobe pattern synthesis using hybrid SSWOA algorithm for conformal antenna array" Engineering Science and Technology, an International Journal (JESTECH),Volume 22, Issue 6, Pp.1169-1174, December2019, ISSN: 2215-0986 https://doi.org/10.1016/j.jestch.2019.06.009 **(SCIE, IF-5.1)**

[7] D.Prabhakar and Dr. P.Mallikarjuna Rao, "Design and Performance of Resonant Spacing Linear Patch Array with Mitered Bend feed Network for Wireless Applications," Indian Journal of Science and Technology, vol:10, No. 31, ISSN (Print) : 0974-6846,ISSN (Online) : 0974-5645, 2017, DOI: 10.17485/ijst/2017/v10i31/92423 , August 2017. **(Web of Science, IF-1.09)**

Scopus Indexed Journals : 11

[1] D. Prabhakar et.al " Prediction of microstrip antenna dimension using optimized auto-metric Graph Neural Network," Intelligent Systems with Applications, 21 (2024) 200326, ISSN: 2667-3053, https://doi.org/10.1016/j.iswa.2024.200326 **(SCOPUS, IF-5.6)**

[2] D. Prabhakar et.al "A hybrid approach for optimising the geometry and design of Ultra Wide Band (UWB) antenna", Australian Journal of Electrical and Electronics Engineering**,** 19(02),158–170,June,2022 ISSN: 1448-837X. https://doi.org/10.1080/1448837X.2021.2023076 **(SCOPUS, IF-2.3)**

[3] D. Prabhakar et.al "Design and development of 1x4 sierpinski fractal antenna array for wireless applications",Harbin Gongye Daxue Xuebao / Journal of Harbin Institute of Technology, 53(12),189–196,December,2021,ISSN:0367-6234 , http://hebgydxxb.periodicales.com/index.php/JHIT/article/view/782 **(SCOPUS)**

[4] **D.Prabhakar** et.al "Design and Development of Antenna Array Using Slots for Multiband Applications," Journal of Advanced Research in Dynamical and Control Systems (JARDCS), Volume 12, Issue 6, Pp. 1995-2004, June, 2020 , ISSN: 1943-023X. **(SCOPUS)**

[5] **D.Prabhakar** et.al "Enhancement of Bandwidth using Inset-Fed Patch Antenna for High Frequency Applications" International Journal of Engineering and Advanced Technology (IJEAT), Volume-9 Issue-1, pp.1528-1531, October, 2019, ISSN: 2249-8958. **(SCOPUS)**

[6] **D.Prabhakar** et.al "Flexible Microstrip patch Antennas Using Different Substrates for Bio-Medical Applications" International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-8 Issue-7, pp. 1350-1352, May, 2019 ISSN: 2278-3075. **(SCOPUS)**

[7] **D.Prabhakar** et.al "Wearable Antennas Using Different Substrates," International Journal of Engineering and Advanced Technology (IJEAT), Volume-8 Issue-4, pp.820-823, April 2019, ISSN: 2249-8958. **(SCOPUS)**

[8] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Sierpinski Carpet Fractal Antenna Array Using Mitered Bend Feed Network for Multi-Band Applications," ARPN Journal of Engineering and Applied Sciences, Vol.12, No.7, ISSN1819-6608, and PP.no:2147-2152, April, 2017. **(SCOPUS)**

[9] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Characteristics of Patch Antenna with Notch gap Variations for Wi-Fi Applications," International Journal of Applied Engineering Research, vol. 11, no. 8 pp 5741-5746, ISSN: 0973-4562, 2016. **(SCOPUS)**

[10] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Generation of ultra side lobes in circular array antenna using evolutionary algorithm," International Journal of Applied Engineering Research, vol. 11, no. 8 pp 5682-5687, ISSN: 0973-4562, 2016. **(SCOPUS)**

[11] D.Prabhakar et.al ***Hybrid ATLA-WSA Based Micro strip Patch Antenna design for UWB Applications*****".** Journal of Automation, Mobile Robotics and Intelligent Systems **(Accepted SCOPUS)**

UGC Indexed and other Journals : 06

[1] D.Prabhakar et.al "Design of Rectangular gap coupled Patch Antenna," Dogo Rangsang Research Journal, Volume 10, Issue 7, Pp. 153-158, July 2020 , ISSN: 2347-7180 **(UGC Care Group I Listed Journal)**

[2] D.Prabhakar et.al "Design of Frequency and Pattern Reconfigurable Antennas by using E-Shaped structure," Juni Khyat, Volume 10, Issue 7, Pp. 107-120, July 2020 , ISSN: 2278-4632 **(UGC Care Group I Listed Journal)**

[3] **D.Prabhakar** et.al "Flexible Patch Antenna using Different Substrates for WBAN Applications "International Journal of Advanced Scientific Research and Management, Volume 4, Issue 4, pp. 151-154, ISSN 2455-6378**,** April 2019. **(UGC approved)**

[4] **D.Prabhakar** et.al "Development of Textile Antennas using Different Substrates for Wireless Body Area Network (WBAN), "International Journal of Research in Advent Technology (IJRAT) Vol.7, No.3, pp.1136-139, ISSN: 2321-9637 March 2019. **(UGC approved)**

[5] **D.Prabhakar** et.al " Compact Spiral Patch Antenna for WLAN Applications, " Solid State Technology, Volume 63, Issue 1, Pp. 165-175, September, 2020 , ISSN: 0038-111X. **(FREE JOURNAL)**

[6] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Design and Performance Analysis of Microstrip Antenna using different Ground Plane Techniques for WLAN Application," I.J. Wireless and Microwave Technologies, vol.6, no. 4, pp. 48-58, ISSN: 2076-1449(Print), ISSN: 2076-9539(Online) 2016. DOI: 10.5815/ijwmt.2016.04.05 **(FREE JOURNAL)**

Conference Proceedings and Book Chapters: 11

[1] D.Prabhakar et.al " Identifying Bikers Without Helmets and Triple Riding Automatically ," Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, 5th EAI International conference, IC4S2024, Bhimavaram, India, April 5-7,2024,Proceedings ,part III. IC4S 2024, LNICST 599, pp. 464–473, 2025.https://doi.org/10.1007/978-3-031-77081-4_36 **(SPRINGER, SCOPUS)**

[2] **D.Prabhakar et.al** "Performance Prediction of Graphene-based patch antenna using different ground plane dimensions," Materials Today: Proceedings, ICFMMP-2021_Lovely Professional University, Punjab, India.Volume 50, Part 5, 2022, Pages 2392-2397 https://doi.org/10.1016/j.matpr.2021.10.255 **(ELSEVIER, SCOPUS)**

[3] **D.Prabhakar** et al.. "Performance of Various Ad Hoc Routing Protocols Using NS-3 Simulator," Annals of the Romanian Society for Cell Biology, Vol. 25, Issue 5, pp. 133-138, May,2021, ISSN:1583-6258 **(SCOPUS)**

[4] **D.Prabhakar** et.al " Implementation of Koch Snowflake Fractal Antenna for Multi-Band Applications " International Journal of Advanced Scientific Research and Management, Volume 4 Issue 4, pp. 30-33, ISSN 2455-6378**,** February 2019.**(UGC approved)**

[5] **D.Prabhakar** et.al " Design And Implementation Of Rectangular Spiral Patch Antenna By Using Coaxial Feed " International Journal of Advanced Scientific Research and Management, Volume 4 Issue 4, pp. 34-41, ISSN 2455-6378**,** February 2019.**(UGC approved)**

[6] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Design and Performance of Resonant Spacing Linear Patch Array with Quarter wave transformer feed Network for Wireless Applications," International conference on computer and communication technology (IC3T-2016), vol. 5, ISBN: 978-981-10-3225-7, pp.no.209-218, November-2016. DOI: 10.1007/978-981-10-3226-4_20 **(Web of Science)**

[7] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Design of Rectangular Patch Antenna Array with Multiple Slots by Using Mitered Bend Feed Network for Multi-Band Applications," International Conference on Electromagnetic Interference & Compatibility (INCEMIC-2016), December-2016, DOI: 10.1109/INCEMIC.2016.7921476 **(Web of Science, SCOPUS)**

[8] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Sierpinski Carpet Fractal Antenna Array Using Quarter wave Feed Network for Wireless Applications," International Conference on Microelectronics Electromagnetic and Telecommunication (ICMEET-2016), Lecture Notes in Electrical Engineering, ISBN 978-981-10-4279-9, ISBN 978-981-10-4280-5 (eBook), ISSN 1876-1100, Vol:434, pp: 445-453, DOI: 10.1007/978-981-10-4280-5_47. **(Springer, SCOPUS)**

[9] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Sierpinski Diamond Fractal Antenna Array using Mitered Bend Feed network for Multi-band applications," National Conference On Recent advances in Communication and Electronics Engineering (RACEE-2016),NIT Warangal, apple academic press CRC Taylor and Francis group, ISBN: 9781771886932

[10] **D.Prabhakar** and Dr. P.Mallikarjuna Rao, "Sierpinski Diamond Fractal Antenna Array Using Quarter Wave Feed Network for Wireless Applications," National Conference On Recent

advances in Communication and Electronics Engineering (RACEE-2016),NIT Warangal , apple academic press CRC Taylor and Francis group, ISBN: 9781771886932.

[11] **D.Prabhakar et.al** "Explainable AI & its Contributions to Smart Cities, Smart Homes, and eHealth" has been peer-reviewed and accepted for publication in the Book Titled "Explainable Artificial Intelligence-based Industrial Internet of Things: Technologies and Applications", to be published by CRC Press,Taylor and Francis. **(SCOPUS, Accepted)**

Research projects completed:

A project title "**Design and Development of Flexible Microstrip Antennas for Wireless Body Area Networks"** with a Grant of 80,000 /- for the academic years 2019-2020,2020-2021 and 2021-2022 funded by GEC, R&D.

Virtual Labs:

- Involved in development of the web-enabled experiments of optical communication lab in association with IIT-Roorkee.

Journal reviewer:

- Acted as reviewer of 6 "Applied Computational Electromagnetics Society (ACES) Journals" (SCIE)
- Acted as reviewer of 10 "Arabian Journal for Science and Engineering (AJSE) Journals" (SCIE)
- Acted as reviewer of 1 "The International Journal of Communication Systems (IJCS)" (SCIE)

Guest Lectures Delivered:

- Acted as Resource person for Two day workshop on **"ANSYS HFSS"** during 29-30 August, 2019 in Gudlavalleru Engineering College, Gudlavalleru.

NPTEL Certification Courses:

1. Successfully Completed NPTEL online course in **Microwave Theory and Techniques** with **Elite + Silver** certificate
2. Successfully Completed NPTEL online course in **Microwave Engineering** with **Elite** certificate
3. Successfully Completed NPTEL online course in **Semiconductor devices and circuits** with **Elite** certificate
4. Successfully Completed NPTEL online course in **Antennas** with **Elite + Silver** certificate

Faculty Development Programs /workshops /Seminars Attended:

- Participated in "Developing AI-Powered AR/VR in the Meteverse Applications" Between 21st to 25th October 2024, organized by D.N.R.College of Engineering and Technology, Bhimavaram.
- Participated in the one week online faculty Development program on "recent Trends in Artificial Intelligence and Machine Learning," organized by Dept.of CSE and allied branches,B.V.C Engineering College, from 18th June to 22 nd June 2024.
- Participated DST-SERB Sponsored a one week workshop on "Design and Simulation of Miniature Antennas using Machine Learning for IoT Applications -DSMAMIA-2023",Organized by department of ECE,MVGR College of Engineering, Vizianagaram, during 5th -10th ,june,2023.
- participated One Week Faculty Development Program on “Applications of Computer Vision using Deep Learning” conducted by the department of Electronics and Communication Engineering, Seshadri Rao Gudlavalleru Engineering College during 20 - 25 February 2023.
- Participated in the workshop designing and modelling of IoT ,AI &ML System organized by AICTE,ATAL Academy and STMicroelectronics from August 1st to 5th 2022.
- participated in One Week National Level Online Faculty Development Program on “Trends in Embedded Systems and IoT” organized by Department of Electronics and Communication Engineering, Seshadri Rao Gudlavalleru Engineering College during 20 - 25 June 2022.
- Participated A Faculty Development Program (Virtual Mode) on “Applications of Artificial Intelligence in Brain-Computer Interface” Sponsored by DST-SERB, Organized by Dept. of ECE, SR University, Hanumakonda, from 9-05-2022 to 13-05-2022
- participated in AICTE-ISTE sponsored One week Online Induction Programme on “Millimeter Wave Frequencies” (Phase-III) organized by Department of Electronics and

Communication Engineering, Gudlavalleru Engineering College during 17-08-2021 to 24-08-2021.

- participated in AICTE-ISTE sponsored One week online Induction Programme on "Millimeter Wave Frequencies" (PHASE II) organised by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College during 16 – 22 March 2021.
- Participated in the One day workshop on "SCHOLARLY COMMNICTION" organized by Research & Development cell, Gudlavalleru Engineering College, Gudlavalleru held on 25 February 2021.
- participated in AICTE-ISTE sponsored One week online Induction Programme on "Millimeter Wave Frequencies" (Phase I) organised by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College during 16 – 21 November 2020.
- Participated in the Two day faculty training programme on "Design and development of VLSI Circuits using Mentor Graphic Tools", organized by Department of ECE, Gudlavalleru Engineering College, Gudlavalleru held during 14th to 15th December 2020
- Participated in the "Five Series Webinar on Introduction to Radar Systems" organized by National Institute of Technology Karnataka, Surathkal, Jointly with Sri Shasha Prayathi Technologies Pvt. Ltd held during: 4-9-2020 to 4-10-2020.
- participated in AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" Phase-III organized by Department of Electronics and Communication Engineering from 24-08-2020 to 29-08-2020.
- participated in AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" Phase-II organized by Department of Electronics and Communication Engineering from 17-08-2020 to 22-08-2020.
- Participated AICTE sponsored Online Short Term Training Programme on "Blockchain Architecture Design and Use Cases" Phase-I organized by Department of Electronics and Communication Engineering, Gudlavalleru Engineering College, Gudlavalleru held during from 10-08-2020 to 15-08-2020.
- participated A National Level Webinar on "Intellectual Property Rights & Patents - A View**"** organized by IQAC, Gudlavalleru Engineering College, Gudlavalleru held during 10 - 12 August, 2020.
- Participated One Week National Level Online STTP 1 on "Trends and Challenges in Design and Implementation of Reconfigurable Antennas for Increased Spectrum Access in

Cognitive Radio Communication" during 20 -25 July 2020, Organized by Department of Electronics and Communication Engineering, Velagapudi RamaKrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.

- Participated in one week international online knowledge development program on " Challenges and Advancements in the Design of IOT, Embedded and VLSI Systems : A researchers View " organized by Department of ECE, Gudlavalleru engineering College, Gudlavalleru from 8-13 June, 2020.
- Participated in A National Level Five Day Faculty Development Programme on "OBE-NBA Process" organized by Internal Quality Assurance (IQAC), NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS) , NARASARAOPET, from 15th May, 2020 to 19th May, 2020.
- participated One Week Online Faculty Development Program on "Advanced Antenna Design Using HFSS" Organized by Department of ECE ,Santhiram Engineering College , Nandyal in collaboration with Vardhaman College of Engineering ,Hyderabad from 12-05-2020 to 17-05-2020.
- participated in One Week Online Faculty Development Program on "Research Challenges and Opportunities Post COVID-19 (RECOP 2020)" organized by Research & Development Cell and Institution's Innovation Council of Sri Vasavi Engineering College (Autonomous) during 4-9 May 2020
- Attended one week FDP on "Data Acquisition and RT using LABVIEW", Organized by Electronics & Communication Engineering Gudlavalleru engineering College in Association with National instruments, Bangalore, Gudlavalleru, during 25th -30th November, 2019.
- Attended a Three day training Programme on "Advanced Development tools based on IoT "Organized by Dept.of ECE, Gudlavalleru engineering College, Gudlavalleru, during 11th to 13th November, 2019.
- Attended one week FDP on "Machine Learning Applications In Signal Processing,", Organized by E & ICT Academy, NIT Warangal at Gudlavalleru engineering College , Gudlavalleru, during 4th -9th February, 2019
- Attended one week FDP on " Communications and signal processing " Organized by Dept.of ECE, Gudlavalleru engineering College, Gudlavalleru, during 29th Oct to 3rd Nov 2018.

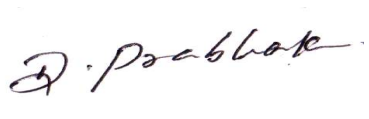
- Attended a two day workshop on "Design and Development of Digital Circuits Using VLSI Tools" Organized by Dept.of ECE, Gudlavalleru engineering College, Gudlavalleru, during 6th to 7th December, 2018.
- Attended One week FDP On "Design and Analysis of RF Antennas using HFSS Software" Organized by Dept.of ECE, LBRCE, Mylavaram, during 13-18 November, 2017.
- Attended one week FDP on "Signal Processing for Wireless Communication" Organized by the E & ICT Academy, NIT Warangal at DVR & Dr .HS MIC College of Technology, Kanchikacherla, during 12-17 June, 2017.
- Attended National Workshop on "Graphical System Design using Labview" Organized by Dept.of ECE, AUCE (A), Andhra University, 30-31March, 2017.
- Attended one week FDP on " Speech and Image Processing " Organized by the E & ICT Academy, NIT Warangal at MVR College of Engineering and Technology Paritala, during 10-15 April, 2017.
- Attended a ten days FDP on "Wireless Communication Hands on" at NIT Warangal 14-23, December, 2015.
- Attended a five day short term training program me on "practical RF Antenna design" at NIT Warangal 6th to 10th July 2015.
- Attended a two day workshop on "Recent Trends & Scope for Research in Signal Processing and Communication" at DVR & Dr .HS MIC College of Technology Kanchikacherla, during 27th to 28th August 2014.
- Attended a one day workshop on "Research methodologies in Electromagnetics" at VVIT, Guntur, on 6th January 2014.
- Attended a two day National seminar on "Image processing and applications" at ANU, Guntur on 3 - 4 December 2011.

Additional Activities:

- Working as ECE Dept. Coordinator for NAAC-CR-3
- Working as ECE Dept. Coordinator for NBA-CR-7
- Working as ECE Dept. Coordinator for NBA CR-7-R&D
- Working as ECE Dept. Coordinator for IQAC
- Working as ECE Dept. Coordinator for AUTONOMOUS
- Working as ECE Dept. R&D Coordinator
- Working as ECE Dept. IIC Coordinator

- Working as Discipline committee member

I hereby declare that the statements made above are true to the best of my knowledge and belief.



Place: Gudlavalleru
Date: 1-03-2025

D.PRABHAKAR