

**Name** **MR. SUJAY D. MAINKAR**

**Designation** Assistant Professor

**Department** Electronics & Telecommunication Engineering

**Date of Joining the Institute** 01/12/2008

**Education** B.E.(E & TC), RMCET, Devrukh, 2007  
M. Tech(E & TC), COEP, Pune, 2015

**Branch / Specialization** Wired and Wireless Communication

**Areas of Interest** Speech and Audio Processing, Image and Video Processing, Communication and Networking, Soft Computing, Machine Learning, Pattern Recognition

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### Academic Appointments

Name of the University / Institute / Industry	Duration	Designation
<b>Finolex Academy of Management &amp; Technology, Ratnagiri</b>	<b>From 01/12/2008 to till date</b>	<b>Assistant Professor</b>
<b>Rajendra Mane College of Engineering and Technology, Ambav, Devrukh</b>	<b>From 19/07/2007 to 30/11/2008</b>	<b>Lecturer</b>

**Total Experience – 11.5 Years**

### Awards / Honors / Prizes

1. Secured **Course Topper with Gold Medal** in NPTEL certification exam for 8 week course **Microwave Integrated Circuits** conducted by Prof. Jayant Mukherjee (IIT, Bombay) during August, 2018 to October, 2018.

2. Received **First Rank with Gold Medal** in NPTEL certification exam for 8 week course Satellite Communication conducted by Prof. K. K. Bandyopadhyay (IIT, Kharagpur) during July, 2017 to October, 2017.
3. Published a **Book Chapter** in “Advances in Computing Applications”, Springer Singapore, 2017 (ISBN 978-981-10-2630-0).
4. **SAP Award of Excellence for being one of the top performers in FDP by IIT Bombay on "Use of ICT in Education for Online and Blended Learning".**

### Seminars/Lecture/Invited Talks Conducted

1. Worked as a **Coordinator** for One Week **AICTE – ISTE approved STTP** on ‘**Digital Image Processing- Issues, Challenges and Research Avenues**’ from 4<sup>th</sup> June, 2018 to 8<sup>th</sup> June, 2018.
2. Organized a workshop and worked as a **Coordinator** for Two days’ workshop on ‘**RF and Antennas: From Theory to Practice**’ at Finolex Academy of Management & Technology, Ratnagiri from 11<sup>th</sup> August and 12<sup>th</sup> August, 2017.
3. Conducted a session on ‘**Do’s and Don’ts in Project Work –Discussion through Case Studies**’ as a resource person for B. E. – E & TC students on 22<sup>nd</sup> July, 2017 at Finolex Academy of Management and Technology Ratnagiri.
4. Organized a workshop and worked as a **Coordinator** for 3-days workshop on ‘**Networking Fundamentals with Hands-on using NS-2/NS-3 and Unified Communication**’ at Finolex Academy of Management & Technology, Ratnagiri from 27<sup>th</sup> January to 29<sup>th</sup> January, 2017.
5. Worked as Departmental Coordinator for Two days’ workshop on ‘**Mobile Antennas-Fundamentals, Design, Fabrication and Testing**’ at Finolex Academy of Management & Technology, Ratnagiri on 1st and 2nd August, 2015.

### Papers Published

#### Book Chapter – 01

1. Sujay D. Mainkar and S.P. Mahajan, “**Performance Comparison for EMD based Classification of Unstructured Acoustic Environments Using GMM and k-NN Classifiers,**” Chapter 8 in “**Advances in Computing Applications**”, Springer Singapore, edited by Dr. Amlan Chakrabarti , Dr. Neha Sharma and Dr. Valentina Emilia Balas, pp. 123 – 135, 2017, ISBN 978-981-10-2630-0; DOI 10.1007/978-981-10-2630-0\_8.

### Papers Presented/Published in National / International Journals - 02

#### International Journals – 02

1. S. D. Mainkar, “**Fuzzy based routing mechanism for lifetime boosting in wireless sensor networks,**” International Journal for Science and Advance Research in Technology (IJSART), Volume 4, Issue 1, January 2018, pp. 741-747 (ISSN: 2395-1052).

2. S. D. Mainkar, "**Performance Comparison of EMD based Noise Classification for different SNR using GMM and k-NN Classifiers,**" International Journal of Emerging Technology and Advanced Engineering, (ISSN: 2250-2459, ISO 9001:2008 Certified Journal, Volume 5, Issue 9, September 2015), pp. 197-203.

### Papers Presented/Published in National/ International Conferences - 03

#### International Conferences – 02

1. S. D. Mainkar, Dr. S. P. Mahajan, "**EMD based Efficient Discrimination of Real-world Environmental Sounds using SVM classifier,**" IEEE International Conference on Information Processing (ICIP-2015), Vishwakarma Institute of Technology, Pune, 16-19 December, 2015.
2. A. A. Tatugade, S. D. Mainkar, "**A Bandwidth sharing approach to improve licensed spectrum utilization in broadband communication,**" Proceedings of International Conference on Emerging Technologies and Applications in Engineering, Technology and Sciences (ICETAETS-2008), Volume-II, pp. 1682-1687, ISBN: 978-81-906220-1-1, Saurashtra University, Rajkot (Gujarat), 13-14 January, 2008.

#### National Conferences – 01

1. S. D. Mainkar, Dr. S. P. Mahajan, "**Optimized Feature Set Extraction using Empirical Mode Decomposition for Classification of Noisy Environmental Conditions,**" Proceedings of IETE and IE approved National Conference on Signal and Data Processing (NCSDP-2015), pp. 33-38, Army Institute of Technology, Alandi, Pune, 11 July, 2015.

### Number of Workshops, Seminars, STTPs, FDPs Attended – 16

#### STTPs and FDPs

1. Attended a One Week AICTE – ISTE approved STTP on '**Digital Image Processing-Issues, Challenges and Research Avenues**' from 4<sup>th</sup> June, 2018 to 8<sup>th</sup> June, 2018.
2. Attended Faculty Development Program on '**Self-Dependence and Advantages of Technology and Digital Marketing**' at Finolex Academy of Management & Technology, Ratnagiri on 23<sup>rd</sup> September, 2016, conducted by Lemures Technologies and IEEE Delhi.
3. Attended an AICTE approved Four-week Faculty Development Program on '**Use of ICT in Education for Online and Blended Learning**' conducted by IIT Bombay under the National Mission on Education through ICT (MHRD, Govt. of India) at Finolex Academy of Management & Technology, Ratnagiri from 2<sup>nd</sup> May to 10<sup>th</sup> July, 2016.
4. Attended Two week AICTE sponsored Faculty Development Program on '**Select Topics in Signal Processing and Machine Intelligence with Hands-on**' conducted during 23<sup>rd</sup> May to 3<sup>rd</sup> June, 2016 organized by Department of Electronics and Telecommunication Engineering, College of Engineering, Pune.

### Conferences and Seminars

1. Attended a **Seminar** on '*Introduction to Speech Technology-Automatic Speech Recognition and Text-to-Speech Synthesis*' conducted by C-DAC Experts organized by Department of Electronics and Telecommunication Engineering, Finolex Academy of Management and Technology, Ratnagiri on 31<sup>st</sup> January, 2018.
2. Attended 2<sup>nd</sup> **National Conference** on '*Recent Advances in Science and Technology (RAST-2K16)*' organized by Finolex Academy of Management and Technology, Ratnagiri from 17<sup>th</sup> to 18<sup>th</sup> February 2016.

### Two Week or One Week Workshops

3. Attended **One Week Workshop** on "**Funding Schemes Available for Research Proposals**" organized by Research Development and Consultancy cell (RDCC) of Finolex Academy of Management and Technology, Ratnagiri from 13<sup>th</sup> February to 23<sup>rd</sup> April 2016
4. Attended a Five-day IEEE workshop on '*Research Issues and Hands-on in Wireless Sensor Network including NS-2*' at Maharashtra Institute of Technology, Pune organized under IEEE Communication Society (Pune Chapter) during 7<sup>th</sup> to 11<sup>th</sup> April, 2015.
5. Attended a Two-Week ISTE workshop on '*Basic Electronics*' conducted by IIT Bombay under the National Mission on Education through ICT (MHRD, Govt. of India) at Finolex Academy of Management & Technology, Ratnagiri from 28<sup>th</sup> June to 8<sup>th</sup> July, 2011.

### Workshops

6. Attended Two days' workshop on '*Cisco Networking*' at Finolex Academy of Management & Technology, Ratnagiri on 3<sup>rd</sup> and 4<sup>th</sup> February, 2016 organized jointly by TechKriti IIT Kanpur and Azure Skynet.
7. Attended Two days' workshop on '*Mobile Antennas-Fundamentals, Design, Fabrication and Testing*' at Finolex Academy of Management & Technology, Ratnagiri on 1<sup>st</sup> and 2<sup>nd</sup> August, 2015.
8. Attended National workshop on '*Microwave, Antenna and Propagation for Modern Wireless Communications*' at Pune Institute of Computer Technology, Pune on 7<sup>th</sup> and 8<sup>th</sup> February, 2014.
9. Attended a Two-day workshop on '*Virtual Labs, Electronics*' Conducted by IIT Bombay in association with MHRD, (Govt. of India) at Finolex Academy of Management & Technology, Ratnagiri on 9<sup>th</sup> and 10<sup>th</sup> April, 2011.
10. Attended a Two-day workshop on '*Simulation of Electronic Circuits and Power Electronics Systems using SEQUEL*' Conducted by Prof. M. B. Patil, IIT Bombay at Finolex Academy of Management & Technology, Ratnagiri on 31<sup>st</sup> October and 1<sup>st</sup> November, 2009.
11. Attended One day workshop on '*Quality Education in Engineering and Technical Institution*' at Finolex Academy of Management & Technology, Ratnagiri on 24<sup>th</sup> January, 2009.

12. Attended One day workshop on '**Quality & Research in Engineering Education**' at Rajendra Mane College of Engineering and Technology, Ambav, Devrukh on 7th April, 2008.

### Professional Membership

1. Indian Society of Technical Education (I.S.T.E): Life Member.
2. The Society of Digital Information and Wireless Communications (SDIWC).
3. International Association of Engineers (IAENG).

### College Exam Duties

1. Worked as a **Senior Supervisor** for **summer 2018 Exam and summer 2011 Exam**.
2. Carried out exam related duties such as **Moderator, Examiner and External Examiner** for conducting theory, practical and oral exam as appointed by Board of Examination, Mumbai University.
3. Worked as a **result-checking committee member**.
4. Worked as a **coordinator** for scheduling and arrangement for conduction of departmental university Practical/Viva Exam.
5. Worked as a **scrutiny committee member**.
6. Worked as an **Invigilator** for University theory exams.

### Other Experience

#### College Level Committees

1. Working as a **departmental coordinator** of **Website Administration committee** (WAC) of Finolex Academy of Management and Technology, Ratnagiri.
2. Working as a **Core Committee Member** of result analysis committee.
3. Working as a **Final Year Project Coordinator** for E & TC department.
4. Working as a **departmental coordinator** of **result analysis committee**.
5. Worked as departmental organizing **committee member** in 2<sup>nd</sup> National Conference on "**Recent Advances in Science and Technology**" (RAST-2K16).
6. Working as a department coordinator for **NAAC Criteria-3 committee**.
7. Working as a **departmental coordinator** of **Library Advisory Committee (LAC)**.
8. Worked as **Committee Member** of **AICTE Extension of Approval (EOA) committee** in January 2017.

### Judge Panel / Staff Selection Committee / Subject Expert

1. Organized a workshop and worked as a **Coordinator** for 3-days workshop on **'Networking Fundamentals with Hands-on using NS-2/NS-3 and Unified Communication'** at Finolex Academy of Management & Technology, Ratnagiri from 27th January to 29th January, 2017.
2. Worked as **Expert Judge for Project Presentation event of National Level Technical Symposium "Scintilla 2K16"** held on 18th & 19th March, 2016 at RM CET, Devrukh.
3. Worked as **Departmental Coordinator** for Two days workshop on **'Mobile Antennas-Fundamentals, Design, Fabrication and Testing'** at Finolex Academy of Management & Technology, Ratnagiri on 1st and 2nd August, 2015.
4. Worked as **Organizing Committee member** for a Two-day workshop on **'Simulation of Electronic Circuits and Power Electronics Systems using SEQUEL'** conducted by Prof. M. B. Patil, IIT Bombay at Finolex Academy of Management & Technology, Ratnagiri on 31st October and 1st November, 2009.

### Subject Taught

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	Internet and Voice Communication	B.E.-E & TC (Sem - VIII)	3 Years
2.	Optical Communication and Networks	B.E.-E & TC (Sem - VII)	4 Years
3.	RF Modeling and Antennas	T.E.-E & TC (Sem - V)	2 Years
4.	Communication Engineering	T.E.-Electrical (Sem - V)	1 Year
5.	Satellite Communication	B.E.-E & TC (Sem - VIII)	1 Year
6.	Antenna and Wave Propagation	T.E.-E & TC (Sem - VI)	3 Years
7.	RF Circuit Design	T.E.-E & TC (Sem - V)	1 Year
8.	Discrete Time Signal Processing	B.E.-E & TC (Sem - VII)	1 Year
9.	Signals and Systems	T.E.-E & TC (Sem - V)	1 Year
10.	Electrical Networks	S.E.-E & TC (Sem - III)	3 Years
11.	Electromagnetic Wave Theory	S.E.-E & TC (Sem - IV)	6 Years
12.	Electromagnetic Fields and Waves	T.E.-Electrical (Sem - V)	1 Year

13.	Principles of Communication Engineering	S.E.-IT (Sem - IV)	2 Years
14.	Communication Systems	T.E.-E & TC (Sem - VI)	1 Year
15.	Electronic Hardware Workshop	T.E.-E & TC (Sem - V)	3 Years