Region 10 Section Report – Bombay Section

PART A - SECTION SUMMARY

A.1 Executive Summary

• Section Executive Committee Member List

No	Name	Position
1	Mr. Abhay A. Phansikar	Section Chair
2	Prof. Suryanarayana Doolla	Section Vice Chair
3	Dr. Vinit Kotak	Section Vice Chair
4	Dr. B Satyanarayana	Section Secretary
5	Prof. Sanjay Pawar	Section Treasurer
6	Mr. Anthony Lobo	Immediate Past Chair
7	Mr. Anand Gharpure	Section Jt. Secretary
8	Dr Saurabh Mehta	Technical & Professional Activities Chair
9	Prof (Ms) Ashwini Kotrashetti	Section Jt. Treasurer
10	Prof Milind Mushrif	Member
11	Aiyappan Pillai	Member
12	Mr Dnyaneshwar Kamble	Member
13	Dr Sanjay Dorle	Member
14	Seema Kawale	Member, WIE Chair
15	Hitesh Mehta	Member, Industry Relations Chair
16	Prof. Kiran Talele	Member, Student Activities Chair
17	Prof Swapnali Makdey	Member
18	Mr Mukund Sathe	Member
	Dr MPS Chawla	Chair MP Subsection, Ex-Officio Member
	Dr Preeti Bajaj	Chair Nagpur Subsection, Ex-Officio Member

• Section Highlights

http://ieeebombay.org/events2018/

• Major Events (International, National)

Technical Events

Number	Date	Event	Description	Attendees
1	14 July	Nasik Industry Meet	Technical lectures and Interactions with	50
	2018		local industry leaders	
2	10-11 Aug	AI & ML workshop	Tutorials and workshops on Ai and ML	150
	2018	NITIE	for students and industry	
3	14-16 Sep	Building of	Engineers Day and IEEE Foundation	1000
	2018	Moonshot	project on 'Furthering Indian Perception	
			on IEEE'	
4	29 &30	Workshop on	These were two day long sessions done	80
	June 2018	Machine Learning –	for industry one at Azilen Technologies	
		Concepts and	and other at Hotel Novotel, with a view	
		Applications	to educate participants with hands on	
			exposure to ML	

Number	Date	Event	Description	Attendees
1	02-10-2018	Solar Lighting Day	Jointly done with various agencies this	5700
			is an attempt to create a Guinness record	School
			for lighting solar lamps at one place, to	Children
			create awareness of Solar	
2	06-10-2018	IEEE Day	Done at the Newest IEEE branch by	107
		Celebration	inviting all new branches counselors	
			with lecture on processes to be followed,	
			branch vitality maintenance	

• Major Chapter Activities

Over 100+ activities are done by Chapters; the details are provided in list in section B. Many DL's visited and gave talks at various locations in the section.

• Major Student and Affinity Group Activities

Key Student Activities are listed herein. Events done by Affinity groups have been listed in Section B.

Number	Date	Event	Description	Attendees
1	11-02-2018	ORIENTATION	IEEE ORIENTATION Cum VOLUNTEER	47
		Cum Training	TRAINING 2018 at Raipur,	
			Revamping/Membership Benefits	
2	24-03-2018	Startup Job &	More than 30 innovative early stage	1000
		Internship Fair	companies offered 200+ roles to 1000 plus	
			students	
3	31-03-2018	Procom 2018	A national level project competition to	122
			showcase innovative ideas that can	
			transform into a commercial product.	
			Winners were awarded over USD 1000	
			dollars in prizes.	
4	19-07-2018	SAC Volunteer	Organized at SITRC Nashik on 19 July	25
		Training	2018 by 19 volunteers across section for	
		Workshop	Branch Revival/Global	
			Outreach/Mentorship.	
5	06-10-2018	Student Branch	Meeting of Branch Counselors to share	103
		Counselor Meet	what is done across their colleges. Focused	
			towards new branches and their active	
			participation & Event co-ordination	
6	06-10-2018	Admin	Meeting of Student Admin Committees to	68
		Committee	share what is done across their colleges.	
		Meet		
7	02-10-2018	CG Region	Train and orient the SBs in the direction of	46
		Student Branch	working properly and lead there pathway	
		Officials Meet	ahead better	

• Awards

Outstanding Volunteer Awards

Sponsorship of members and student members to attend various leadership conferences Scholarships

Number	Date	Event	Description	Attendees
1		Hemant Sonawala	Approx USD 1500 Dollars for Needy	
		Award	girl engineering stdunt with active IEEE	
			record.	
2		XTREME AWARD	Over USD 1500 dollars were budgeted	
			for teams that came in first 100 ranking	
			in country	
3		Needy Girls	Approx USD 750 Dollars total for	
		Scholarship	Needy girl engineering student with	
			active IEEE record.	
4		WIE Project win	Awarded to winners of Project	

	award	competition in international event, approx. USD 150	
5	SWYC Participation	Approx USD 1000 dollars for deserving candidates to participate in SYWC	
6	AISYC Congress Participation Award	Approx USD 500 dollars for deserving candidates to participate in SYWC	

A.2 Financial Report – (Please follow the format given below)

• Summary (as per submitted L50)

All amounts shown herein are in Indian Rupees

BOMBAY SECTION R00121 BUDGET	Budget 17_18	Actual 17-18	Budget 18_19
Inflow during the year			
Conf Income			
Rebate from IEEE Headquarters / Reimb	1,600,000.00	1,643,075.00	1,700,000.00
Interest from SB & FD accounts	300,000.00	446,225.00	500,000.00
Income form Events and other sources	100,000.00	127,895.00	200,000.00
Grants received for various projects		793,404.00	
Total Income	2,000,000.00	3,010,599.00	2,400,000.00
Expenses			
Conferences (net outflow)	100,000.00	89,717.00	100,000.00
Professional Activities (Workshop/Seminars/DLs)	250,000.00	246,685.00	250,000.00
Area wise Technical activities	150,000.00	185,600.00	200,000.00
Job Fairs			
Student Activities (Section)	200,000.00	250,095.00	250,000.00
Grants and Awards (Students)	100,000.00	64,665.00	150,000.00
Meeting and Social Events	150,000.00	352,458.00	300,000.00
Promoting IEEE Brand, Website, Membership Development	50,000.00	45,398.00	50,000.00
Travel	100,000.00	156,282.00	150,000.00
Accounting, Audit, Section registration expenses	50,000.00	75,470.00	75,000.00
Other Management, General Expenses, Secretarial assistance	150,000.00	58,165.00	175,000.00
Chapters	100,000.00	98,856.00	100,000.00
Affinity Groups	100,000.00	57,550.00	100,000.00
Sub-Sections (complete)	500,000.00	239,873.00	500,000.00
Grants + Expenses for Student Activities		438,613.00	
Grants + Expenses for Professional Activities		453,647.00	
Total Expenses	2,000,000.00	2,813,074.00	2,400,000.00

• Any other financial activities

Executive Committee and Other Admin Meetings

Executive Committee Meetings

These meetings last typically two and half hours each and the agenda consists of General Communications, Admin & Operations, Accounts Presentation, Technical Events, Conferences and presentation by various chairs.

Number	Date	Event	Description	Attendees
1	24-02-18	First Execom	DBIT, Kurla at 9:30am	17
2	10-03-2018	Second Execom	SBJITMR, Nagpur at 4pm	13
3	14-04-2018	Third Execom	IIT Bombay	18
4	12-05-2018	Fourth Execom	IIT Bombay	13
5	09-06-2018	Fifth Execom	IIT Bombay	11
6	14-07-2018	Sixth Execom	Solitaire Hotel Nasik	11
7	11-08-2018	Seventh Execom	NITIE Mumbai	18
8	08-09-2018	Eighth Execom	IIT Bombay	16
9	29-09-2018	Ninth Execom	RBYC, Colaba	18
10	13-10-2018	Tenth Execom	DBIT, Kurla	14
11	10-11-2018	Eleventh Execom	TIFR, Mumbai	16
12	8-12-2018	Twelfth Execom	IIT Mumbai	15

Number	Date	Event	Description	Attendees
1	14-07-2018	Meeting with	This meeting was with industry and	35
		regional	academic members with a view to enhance	
		members at	activities in that region. Two Technical	
		Nasik	lectures, AI- Right time for industry now?	
			And How to measure a distance less than a	
			hair from far were delivered.	
2	11-10-2018	Meeting with	This meeting was with industry and	8
		Regional	academic members with a view to enhance	
		Members at Goa	activities in that region.	

AGM

Number	Date	Event	Description	Attendees
1	29-09-2018	Bombay Section AGM	Annual General Meeting of the section to pass accounts, update on activities during the year and pass the next year's budget.	60
2	04-08-2018	Nagpur Subsection AGM	Annual General Meeting of the sub- section to pass accounts, update on activities during the year and pass the next year's budget.	57
3	23-12-2018	Madhya Pradesh Subsection AGM	Annual General Meeting of the sub- section to pass accounts, update on activities during the year and pass the next year's budget.	32
4	8-12-2018	Section EGM	To pass the by-laws amendment	48

Section Representation at IEEE, R10 and India Council

- 3 Section officers (Mr. Abhay Phansikar, Dr Satyanarayana, Dr Surya Doolla, Sub-Section Chair Dr. Preeti Bajaj on India Council Execom (Member, Vice Chair Tech, Webmaster, Secretary) in addition to Section Chair (ex-officio Member)
- Imm. Past. Chair Mr. Anthony Lobo one of 3 India Council volunteers on R10 India Membership Task Force
- Mr Anand Gharpure & Mr. Aiyappan volunteers in the MGA India Strategic Initiative, and also Indian Insurance Support Team
- Hitesh Mehta on MGA Elevation Committee

PART B - ORGANIZATIONAL ACTIVITIES

B.1 Membership Development Activities

• Total number of active members in the past 3 years.

	2018	2017	2015
Life Fellow	5	5	7
Fellow	11	9	8
Life Sr Mem	15	10	10
Sr Memb	242	217	177
Life Member	6	5	7
Member	1592	1752	1859
Assoc. Mem.	65	73	53
Gr. St. Mem.	751	633	704
Affiliate/SA	47		
Hi Grd. Total	2734	2704	2814
St. Mem.	5712	5537	4606
Grand Total	8446	8241	7420

• Summary and evidence of work done to improve the value of membership, which leads to retention and growth of members

Technically Sponsored Events

IEEE Bombay Section technically co-sponsored various conferences spanning across the region. The section nominated on representative from the Executive Committee to ensure that the quality of the conference is maintained to IEEEE standards.



Technical/Professional Activities: SKEP (Skill and Knowledge Enhancement Program)

The program was initiated in 2013 and is now a flagship event of the section. The events are either wholly sponsored by the section or co-sponsored by society chapters/affinity groups. It has grown from strength to strength with 2015 seeing the program extend to towns outside Mumbai. In the marathon format, 36 (12 + 24) sessions were organized in academic as well as research institutions in two waves. The highlight of the program is the practical orientation of sessions, mostly conducted by Industry experts.

THE SKEP now runs two hands on workshops on EMBEDDED SYSTEMS & VLSI, AT&ML. More workshops will be added in coming years.

B.2 Chapter Activities

• Total number of Chapters in the Section

Computer Society
Communications Society
AP/ED Chapter
SMC Chapter
Signal Processing
IA/PE/IM Chapter
MTTS Chapter
TEMS
Life Members Affinity Group
YP - GOLD
WIE
Bombay SIGHT Pratham

• Number of Chapters formed in the current year

Two New Chapters got added at Section Level, The Consumers Electronics Society and Power Electronics Society/Industrial Electronics Society Joint Chapter. However since the approval is as of Dec 28, received in January, their installation was done in 2019.

• Number of active Chapters (Chapters who have reported required number of meetings during the year)

All the above chapters are active.

• Summary of Chapter activities (Chapter wise with attachment table/information)

Event Title	Event Date Organizational Uni	Event Location	Number of Attendar
IEEE EDS Distinguished Lectures on Photovoltaics at VNIT Nagpur	2/9/2019 14:00 AP03/ED15	VNIT Nagpur, Nagpur	10:
	2/5/2019 11:30 AP03/ED15		10
Towards Complementary Logic in III-Nitrides : Is AIN the answer?		Department of Electr	
Manipulation of single photons using nanophotonics Expert talk on Neuromorphic Systems	1/11/2019 14:30 AP03/ED15 12/21/2018 14:30 AP03/ED15	Department of Electr Department of Electr	
Expert talk on photovoltaics	12/10/2018 14:30 AP03/ED15	IIT Bombay , Departn	
Talk on 5G by Dr. Mark Pinto	12/6/2018 15:00 AP03/ED15	Department of Electr	
Expert Talk on Graphene Based Devices	12/1/2018 14:30 AP03/ED15	Physics Assembly Hal	10
Expert talk on silicon photovoltaic devices	11/9/2018 12:00 AP03/ED15	GG301, Department	
Expert lecture on Flexible Electronic Skin	11/8/2018 14:30 AP03/ED15	GG conference room	
Expert talk on Power Semiconductor Devices	11/1/2018 14:30 AP03/ED15	GG conference room	
IEEE Electron Device Society Distinguished Lecture by Prof. Vikram Dalal, Iowa State Uni		Department of Electr	
SiC Power Device Processing - An Exercise in Si Fabrication with a High Temperature Tw		GG Conference room	
Recent progress in semiconductor power devices	1/11/2018 10:00 AP03/ED15	GG Conference room	2
Neuromorphic engineering: from devices to circuits for energy- efficient computing and		GG conference room	
Stiction aided fabrication of Silicon nanomembranes for MEMS applications	1/8/2018 14:30 AP03/ED15	Department of Electr	
Electronics for All	1/5/2018 14:30 AP03/ED15	Mumbai, Maharashti	
Convergence of Science, Engineering and Technology for Global Challenges	1/4/2018 14:30 AP03/ED15	Mumbai, Maharashti	
Recent Status in Polarization Super Junction technologies in Gallium Nitride	1/3/2018 15:00 AP03/ED15	Mumbai, Maharashti	
	1/3/2018 13.00 AT 03/2013	ividilibai, ividilai asiiti	
C16			
Event Title	Event Date Organizational Uni		Number of Attenda
Embedded design and Product Development	2/28/2018 10:30 C16	SFIT, Mumbai, Mahar	
Embedded design and Product Development	2/28/2018 10:30 C16	SFIT, Mumbai, Mahar	
Embedded design and Product Development	2/28/2018 10:30 C16	SFIT, Mumbai, Mahar	
Hands-on Workshop on Machine Learning: Concepts and Applications with Python	2/10/2018 09:00 C16	VJTI, Mumbai, Maha	
Trends and Technologies of VLSI devices	2/9/2018 15:40 C16	MET, Nashik, Mahara	
Hands-on Workshop on FPGAs and Soft-processors	1/28/2018 10:05 C16	M.H. Saboo Siddik Co	3
COM19			
Technical Talk on 5G	7/23/2018 13:54 COM19	MGM College of Engi	6
IEEE ComSoc Lecture	3/21/2018 15:00 COM19	Seminar Hall , Santac	
IT for Telecom	3/19/2018 10:15 COM19	SFIT, Mumbai, Mahar	
Nuclear Magnetic resonance Spectroscopy: Introduction and Perspective	3/17/2018 10:30 COM19	RCOEM, Nagpur, Mah	
High speed signal processing techniques	3/10/2018 13:00 COM19	RCOEM, Nagpur, Mal	
Hands-on Workshop on Business Intelligence Tools	3/10/2018 11:00 COM19	SFIT, Mumbai, Mahar	
Structure and writing of a technical paper	3/5/2018 13:30 COM19	RGIT, Andheri, Mumb	
MTT17	5, 5, 2020 2010 001120	, , , , , , , , , , , , , , , , , , , ,	
MTT-S Promotion Activity	12/5/2018 15:00 MTT17	IIT Bombay, Powai, N	
Distinguished Member Lecture	11/26/2018 11:00 MTT17	IIT BOMBAY, POWAI,	3
EXPERT TALK	7/18/2018 14:30 MTT17	DON BOSCO INSTITU	
Towards Smart Cellular Antennas	3/8/2018 10:00 MTT17	DON BOSCO INSTITU	8
PE31/IA34			
EV Battery Supercharger: Confluence of Advanced Power Electronics and Next-Generat	12/18/2018 15:00 PE31/IA34	Mumbai, Maharashtr	6
EV Battery Supercharger: Confluence of Advanced Power Electronics and Next-Generat	12/18/2018 14:30 PE31/IA34	Department of Electr	3
Chapter Meeting	12/15/2018 16:00 PE31/IA34	VMCC, IIT Bombay, N	2
Hybrid Standalone Power Generation Systems	12/11/2018 15:00 PE31/IA34	Department of Electr	4
Introduction: Hybrid Renewable Energy Standalone Systems	12/10/2018 15:00 PE31/IA34	Mumbai, Maharashti	4
Chapter Meeting	7/14/2018 16:00 PE31/IA34	Victor Menezes Conv	2
Chapter Meeting	7/14/2018 16:00 PE31/IA34	Victor Menezes Conv	2
Impact of WBG (Wide-Band Gap) Devices on Power Electronics Applications	7/4/2018 15:00 PE31/IA34	Department of Electr	3
Perspectives on the Analysis and Control of Electric Machines	5/18/2018 16:00 PE31/IA34	Department of Electr	3
Industry Academia Meet - GeorgiaTech Professor	5/8/2018 18:38 PE31/IA34	Department of Energ	
Decentralized Control Using Power Electronics – A Key Enabler for the Future Grid	5/8/2018 16:00 PE31/IA34	Department of Energ	20
SMC28			
Embedded Systems - Advances, Trends and Opportunities	4/11/2018 14:30 SMC28	Fr.Conceicao Rodrigu	5
RFID an overview & applications	4/2/2018 14:00 SMC28	Maharashtra Institut	
Lab-on- a-chip Devices for Energy and Biomedical Applications	3/26/2018 13:30 SMC28	Hyderabad, Maharas	
Materials, Methods and Manufacturing	3/26/2018 10:00 SMC28	RCOEM, Nagpur, Mah	
		, ,	-
SP01			
	7/12/2019 14:21 5001	American in the College	-
Avionics and Carrier in Aerospace Industries Amateur Radio and wireless communication	7/13/2018 14:31 SP01	Amrutvahini College	
Recent Developments in India's National Solar Mission	7/13/2018 14:00 SP01	Amrutvahini College	
Recent Developments in India's National Solar Mission	7/11/2018 15:00 SP01	RCOEM, Nagpur, Mal RCOEM, Nagpur, Mal	
Importance of research at undergraduate level	7/11/2018 12:00 SP01 7/9/2018 15:00 SP01	SITCOE, Yadrav, KOLH	
·	7/3/2010 13.00 3FUI	Jircol, Iduidy, NULF	5
TEM14			
Enteraction with IEEE TEMS Global Team for coursework discussion and design	12/15/2018 00:03 TEM14	Mumbai, Mumbai, M	
PM Conclave	11/17/2018 10:00 TEM14	Mumbai, Mumbai, M	
Enteraction with IEEE TEMS Global Team for coursework discussion and design	9/15/2018 00:00 TEM14	Mumbai, Mumbai, M	
Taming Counterfeits using Blockchain	9/14/2018 14:00 TEM14	Mumbai, Mumbai, M	
Digital Leadership Summit	8/18/2018 08:54 TEM14	Mumbai, Mumbai, M	
Embedded Design & Product Development	7/20/2018 15:02 TEM14	MET, Nashik, Mahara	
Modern sensors, signal processing and applications	7/19/2018 15:00 TEM14	MGMCET, Navi Mum	5
Innovative Project Development	7/14/2018 13:00 TEM14	Amrutvahini College	5
Embedded Technology: Raspberry PI and Arduino Boards	7/14/2018 12:05 TEM14	Amrutvahini College	5
Visit of Mr. Dileep Kotak, Treasurer, IEEE TEMS Global Board	5/4/2018 00:00 TEM14	NITIE, Mumbai, Maha	1

B.3 Professional and Continuing Education Activities

Summary of continuing Educational activities including conferences, technical activities, training courses, and distinguished lecture programs with attachment table / information

Professional and Continuing Education Activities

The section conducted various technical activities as part of SKEP and Chapter activities and they have been highlighted in other Sections. Some other activities not listed there are provided here.

Number	Date	Event	Description	Attendees
1	14 July	Nasik Industry Meet	Technical lectures and Interactions with	50
	2018		local industry leaders	
2	10-11 Aug	AI & ML workshop	Tutorials and workshops on Ai and ML	150
	2018	NITIE	for students and industry	
3	14-16 Sep	Building of	Engineers Day and IEEE Foundation	1000
	2018	Moonshot	project on 'Furthering Indian Perception	
			on IEEE'	
4	29 &30	Workshop on	These were two day long sessions done	80
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		Concepts and	and other at Hotel Novotel, with a view	
		Applications	to educate participants with hands on	
			exposure to ML	

IEEE Day

Number	Date	Event	Description	Attendees
1	02-10-2018	Solar Lighting Day	Jointly done with various agencies this	5700
			is an attempt to create a Guinness record	School
			for lighting solar lamps at one place, to	Children
			create awareness of Solar	
2	06-10-2018	IEEE Day	Done at the Newest IEEE branch by	107
		Celebration	inviting all new branches counselors	
			with lecture on processes to be followed,	
			branch vitality maintenance	

IPR Day function

Number	Date	Event	Description	Attendees
1	26-04-2018	Thakur College	Inauguration of IPR cell at Thakur	50
			College followed by Workshop cum	
			Seminar on IPR and its importance and	
			steps to be taken.	
			Inauguration of IPR cell at Thankur	
			college was also done.	

Engineers Day Event

Number	Date	Event	Description	Attendees
1	08-08-2018	Engineers Day Joint	Jointly done with IETE this is a half day	150
		Event	program of technical talks followed by	
			networking	

B.4 Students Activities

• Total number of Student Branches in the Section

There are currently 132 branches listed, more than 50% are inactive. The section has undertaken a campaign to revive, we have been successful with many of them, however a thrust can be provided again after the admission this year around July 2019.

			\
No	Student Pranch	No	Student Branch
No 1	Student Branch Acropolis Institute of Technology and Research SB	No 67	Student Branch Padmabhushan Vasantdada Patil Coll Of Eng
	All India Shri Shivaj Mem Soc Inst of Info Techi		Padmashree Dr D Y Patil Inst Of Eng & Tech
	Amrutvahini College of Engineering SB		Padmashri Dr Vithalrao Vikhe Patil Coll
	Atharva College of Engineering SB		Padre Conceicao College Of Engrg
	Bansal Inst Research & Tech SB		Parshvanath College Of Engrg
	Bharat College of Engineering SB		Patel Group of Institutions
	Bharati Vidyapeeths Col of Eng For Women SB	72	- Indore, SB
	Bhilai Inst Of Tech Durg SB	73	Peoples Education Society Coll of Engineering SB
	Birla Institute of Tech and Science Pilani-Goa SB		Pillais Inst Of Info Tech Eng ,Media Studies & Research
	Central India Institute of Tech - Indore SB		Pimpri Chinchwad College Of Engineering
11	Cummins College of Engineering For Women SB		Priyadarshini Coll Of Eng
	D Y Patil College of Engineering SB	76	& Architec
13	D.K.T.E.'s Textile & Engin Inst Ichalakaranji SB	77	Priyadarshini Institute of Eng & Tech, Nagpur SB
14	Datta Meghe College of Engineering SB	78	R.C. Patel Institute of Technology, Shipur SB
15	Dilkap Research Inst of Eng & Man Studies, SB	79	Rajarambapu Inst Of Tech SB
16	Don Bosco Inst of Tech SB	80	Rajiv Gandhi Col of Eng, Res & Tech, Chandrapur SB
17	Dwarkadas J Sanghvi College Of Engineering SB	81	Ramrao Adik Inst Of Tech
18	Fr Conceicao Rodrigues College of Engineering SB	82	Rizvi College Of Engineering
19	Fr Conceicao Rodrigues Inst of Tech SB	83	Rungta College Of Engineering & Tech SB
20	G H Raisoni College of Engineering SB	84	Rungta Group of Colleges SB
	Goa College of Engineering SB		S. B. Jain Institute of Tech Nagpur SB
	Godavari College of Engineering - Jalgaon SB		SND Coll of Eng and Res Center Babhulgaon SB
	Government College of Engineering Amravati SB		SOET, ITM University Gwalior, SB
	Gyan Ganga College of Technology SB		SSBT College of Engrg & Tech SB Jalgaon
	Gyan Ganga Inst of Tech	89	Sagar Institute of Research & Tech SB
	& Management - Bhopal SB	90	Sagar Institute of Science
	Gyan Ganga Inst of Tech and Management Jabalpur S		& Technology SB
	IES College of Technology - Bhopal SB		Sanghvi Institute of Management & Science SB
	IPS Academy - Inst of Eng & Sciences SB		Sanjay Education Society'S College Of
	Indian Inst of Technology- Bombay SB		Sanjiwani Rural Educ Soc College Of Eng
	Inst of Engineering & Tech SB		Sant Gadge Baba Amravati University SB
	Jabalpur Engineering College		Saraswati College of Engineering SB
	Jawahar Education Society'S Ac Patil Col of Engrg		Sardar Patel College Of Engineering
	Jawaharlal Nehru Engineering College		Shah & Anchor Kutchhi Engrg College
	Jhulelal Institute of Technology, Nagpur SB Jspm'S Rajarshi Sharu College of Eng SB		Sharadchandra Pawar College of Eng SB Shri G S Inst Of Tech & Science
	K K Wagh Inst of Engg- Edu & Research SB		Shri Ramdeobaba Kamla Nehru Eng College
	K.C. College of Engineering SB		Shri Sant Gajanan Maharaj College Of Eng
	Kavikulguru Inst of Tech		Shri Shankarachary Inst of Prof Mgmnt and Tech SB
	& Sci SB		Shri Vaishnav Inst Of Tech & Sci
	Kit's College of Engineering SB		Shrimati Indira Gandhi College Of Eng
	Kj Somaiya College of Engineering SB		Sies Graduate School Of Tech Sb
	Kj Somaiya Inst of Engrg		Sinhgad College Of Engineering
415	& Information Tech SB		Sinhgad Institute of Technology-Lonavala SB
42	Konkan Gyanpeeth College of Engr-Karjat SB	108	Sipna's College of Eng & Tech - Amravati SB
	Lakshmi Narain College Of Tech SB	109	Sri Aurobindo Institute of Technology SB
44	Late G. N. Sapkal College of Engineering, SB	110	St Francis Inst Of Tech - Mt Poinsur
	Lokmanya Tilak College of Engineering SB	111	St John College Of Eng & Tech SB
46	M H Saboo Siddik College Of Engineering SB	112	Sushila Devi Bansal College of Technology SB
47	MBES College of Engineering - Ambajogai SB	113	Swami Vivekanand College of Engineering SB
48	MGM College Of Eng & Tech SB	114	TIT College Bhopal SB
49	Mahakal Institute of Technology SB	115	Technocrats Instute of Tech, Bhopal SB
	Maharashtra Academy of Engineering SB	116	Terna Engineering College
51	Maharashtra Inst of Tech SB	117	Thadomal Shahani Eng College SB
	Manoharbhai Patel Inst of Eng & Tech, Gondia		Thakur College Of Eng & Tech
	Mansarovar Inst of Science and Tech SB		Truba College of Engineering and Technology SB
	Maulana Azad National Inst of Tech SB		Universal College of Engineering, SB
	Mbm Engineering College/Jodhpur Univ		Usha Mittal Inst Of Tech
	Mct Rajeev Gandhi Inst of Tech SB		VES Institute of Technology
	Medi-Caps Inst of Tech & Mgmt SB		Veermata Jijabai Technical Inst
	Met's Bhujbal Knowledge City SB		Vidarbha Youth Welfare Soc Coll Of Eng Sb
	Modern Educ Soc College of Engineering SB		Vidya Pratishthan's College of Eng - Baramati SB
	Narsee Monjee Inst of Mgnt/High Studies- Shirpur SB		Vidyalankar Inst Of Tech
	Nashik Dist Maratha Vidya Prasarak Samaj'S C.O.E.		Vidyavardhini'S College Of Engrg & Tech Sb
	National Institute of Technology - Raipur SB		Vishwakarma Inst Of Tech
	National Institute of Technology Goa SB		Visvesvaraya Nat'L Institute Of Tech
	O.P. Jindal Institute Technology SB		Watumull Inst Of Elect Eng & Comp Tech
	Oriental University, Indore SB P. E. S. Modorn College Of Engineering		Xavier Inst Of Engineering
ומס	P E S Modern College Of Engineering	132	Yeshwantrao Chavan College Of Engineering

Number of Student Branches formed in the current year

14 New student Branches were formed this year. Many of them got approvals in December, hence their activities will start in 2019.

Don Bosco , Goa	SM Jondhale, Dombivali
Rajiv Gandhi PV Bhopal	JD COEM Nagpur
Pimpri Chinchwad COE, Ravet	Guru Gobind Singh, Nanded
ISBM, Lavale	MIT Aurangabad
Sandip University, Nashik	KJ Somaiya IMS, Ghatkopar
MET ISC Bandra	VSIT Wadala
GHRIT Nagpur	Sharad Institute Yadrav

• Section level student activities (student congress, paper and other contests, awards etc)

The Bombay Sections Student Congress which was to be held in later half of 2018 had to be shifted twice, now to Jan 2019, as the dates clashed with India Council events. It has been done in Jan 2019 and shall be reported in next year.

Number	Date	Event	Description	Attendees
1	11-02-2018	ORIENTATION	IEEE ORIENTATION Cum VOLUNTEER	47
		Cum Training	TRAINING 2018 at Raipur,	
			Revamping/Membership Benefits	
2	24-03-2018	Startup Job &	More than 30 innovative early stage	1000
		Internship Fair	companies offered 200+ roles to 1000 plus	
			students	
3	31-03-2018	Procom 2018	A national level project competition to	122
			showcase innovative ideas that can	
			transform into a commercial product.	
			Winners were awarded over USD 1000	
			dollars in prizes.	
4	19-07-2018	SAC Volunteer	Organized at SITRC Nashik on 19 July	25
		Training	2018 by 19 volunteers across section for	
		Workshop	Branch Revival/Global	
			Outreach/Mentorship.	
5	06-10-2018	Student Branch	Meeting of Branch Counselors to share	103
		Counselor Meet	what is done across their colleges. Focused	
			towards new branches and their active	
			participation & Event co-ordination	
6	06-10-2018	Admin	Meeting of Student Admin Committees to	68
		Committee	share what is done across their colleges.	
		Meet		
7	02-10-2018	CG Region	Train and orient the SBs in the direction of	46
		Student Branch	working properly and lead there pathway	
		Officials Meet	ahead better	

A student activities team has been formed with a tenure of two years with regional representation across the geography, with focus on increasing activities, awareness, branch revival and reporting.



• Number of active Student Branches (Student Branches who have reported required number of meetings during the year)

Over 30-40 branches are very active, another 20 branches have shown revival in activities, we expect a good increase in this number in 2019. However, getting them to report in Vtools is still a challenge, and we now are runiing campaigns to educate and make them aware of the advantages of Vtools.

• Summary of Student Branch activities (Student Branch wise with attachment table/information)

B.5 Affinity Group Activities

One day Workshop on "Gaming Seminar‮

WIE

"LOGO QUIZ‮

IEEE SB 62361 EXCOM MEETING

QUIZZARDO

Elevator Pitch

Number	Date	Event	Description	Attendees
1	07-09-	Branch Co-	To introduce the WIE to branches	44

1/25/2018 14:30 G H Raisoni College of Engineerin NAGPUR, M

1/25/2018 10:30 G H Raisoni College of Engineerin NAGPUR, M

1/19/2018 14:33 G H Raisoni College of Engineerin NAGPUR, M

1/18/2018 10:32 G H Raisoni College of Engineerin NAGPUR, M

1/3/2018 12:00 Sardar Patel Institute of Technolc Bhavan's Ca

68

64 36

18

				12
	2018	ordinator meet	to motivate to start WIE	
2	06-10-	Admin	To introduce the WIE to branches	67
	2018	Committee	to motivate to start WIE	
		meet		
LMAG				
Number	Date	Event	Description	Attendees
1	10-10-	LMAG Lunch	Invited LM, Fellows and Senior	12
	2018		members for lunch and	
			interaction with Dr Dalal, DL ED	
YP				
Number	Date	Event	Description	Attendees
1	24-03-	SPIT Job Fair	Jointly done with SAC and	1000
	2018		reported under SAC activities,	
			this lead to 200+ placement and	
			internship offers.	
2	06-10-	Admin	Vtools Presentation, Xtreme and	67
	2018	Committee	continuing membership as YP	
		meet	benefits	
3	26-10-	TISP	Teacher in Service Program	35
	2018		undertaken with Maths Lab	
			Concept. Participants included	
			teachers fromGoa State also.	
EAB	D : 1	.	B : ::	4 1
Number	Date	Event	Description	Attendees
1	26-04-	IPR day	Inauguration of IPR cell at	50
	2018	function	Thakur College followed by	
			Workshop cum Seminar on IPR	
			and its importance and steps to be taken.	
			Inauguration of IPR cell at Thankur college was also done.	
			mankui conege was also dolle.	

B.6 Awards & Recognition Activities

Award constituted by the Section

Outstanding Volunteer Awards

Sponsorship of members and student members to attend various leadership conferences Scholarships

Members have received various recognitions including travel awards to represent section at R10, PES Conference and Richard E Merwin Scholarship. Members also received certificate of recognition including Gold and Silver for Membership Growth and Retention from 2017 to 2018.

Members have also received grants from IEEE HAC and IEEE New Initiatives for proposals submitted by them.

Number	Date	Event	Description	Attendees
1		Hemant Sonawala	Approx USD 1500 Dollars for Needy	
		Award	girl engineering stdunt with active IEEE	
			record.	
2		XTREME AWARD	Over USD 1500 dollars were budgeted	
			for teams that came in first 100 ranking	
			in country	
3		Needy Girls	Approx USD 750 Dollars total for	
		Scholarship	Needy girl engineering student with	
			active IEEE record.	
4		WIE Project win	Awarded to winners of Project	
		award	competition in international event,	
			approx. USD 150	
5		SWYC Participation	Approx USD 1000 dollars for deserving	

		candidates to participate in SYWC	
6	AISYC Congress	Approx USD 500 dollars for deserving	
	Participation Award	candidates to participate in SYWC	

B.7 Communication Activities (Newsletter, Home Page, E-mail etc.)

• Home Page of the Section (give the URL and how often it is updated)

<u>www.ieeebombay.org</u>, updated regularly at least few times in a month. E-Notices are sent on a fairly regular basis.

- Other means of contacts with Section members including social media
- Facebook Page
- ➤ Bombay Section Students Network site
- Section Execom Whatsapp Group
- > Branch Counsellors Whatsapp Group
- > Student Represantitives Whatsapp Group.

B.8 Industry Relations

• Membership growth and retention

This has been covered in Membership Development and Professional Development Section.

• Activities for/with industrial members

Number	Date	Event	Description	Attendees
1	14-07-2018	Meeting with	This meeting was with industry and	35
		regional	academic members with a view to enhance	
		members at	activities in that region. Two Technical	
		Nasik	lectures, AI- Right time for industry now?	
			And How to measure a distance less than a	
			hair from far were delivered.	
2	11-10-2018	Meeting with	This meeting was with industry and	8
		Regional	academic members with a view to enhance	
		Members at Goa	activities in that region.	

Number	Date	Event	Description	Attendees
1	14 July	Nasik Industry Meet	Technical lectures and Interactions with	50
	2018		local industry leaders	
2	10-11 Aug	AI & ML workshop	Tutorials and workshops on Ai and ML	150
	2018	NITIE	for students and industry	
3	14-16 Sep	Building of	Engineers Day and IEEE Foundation	1000
	2018	Moonshot	project on 'Furthering Indian Perception	
			on IEEE'	
4	29 &30	Workshop on	These were two day long sessions done	80
	June 2018	Machine Learning –	for industry one at Azilen Technologies	
		Concepts and	and other at Hotel Novotel, with a view	
		Applications	to educate participants with hands on	
			exposure to ML	

B.9 Humanitarian Technology Activities

• Humanitarian Technology related activities supported by the Section including collaboration with other OUs.

SIGHT Activities

Under SIGHT Vidushi Program certain life skills training and job opportunities by teaching Solar lamp assembly, maintenance and repairs were undertaken for ladies of villages. Another program was to teach computer to ladies from villages so that they do not have a challenge in communication with their kids who were becoming computer savvy, nor have any mental roadblock in using that device. This program has been continued.

Also, an effort was made for creating water maps of villages and doing rain water harvesting, however these initiatives were curtailed due to lack of funding.

HAC had provided grant for improving hygiene amongst the tribal ladies in the village of Walvanda and this program was executed successfully.

B.10 Community Activities

• IEEE Social activities (Family day, IEEE day, Engineers Week)"

IPR Day function

Number	Date	Event	Description	Attendees
1	26-04-2018	Thakur College	Inauguration of IPR cell at Thakur	50
			College followed by Workshop cum	
			Seminar on IPR and its importance and	
			steps to be taken.	
			Inauguration of IPR cell at Thankur	
			college was also done.	

Engineers Day Event

Number	Date	Event	Description	Attendees
1	08-08-2018	Engineers Day Joint	Jointly done with IETE this is a half day	150
		Event	program of technical talks followed by	
			networking	

IEEE Day Events

Number	Date	Event	Description	Attendees
1	02-10-2018	Solar Lighting Day	Jointly done with various agencies this	5700
			is an attempt to create a Guinness record	School
			for lighting solar lamps at one place, to	Children
			create awareness of Solar	
2	06-10-2018	IEEE Day	Done at the Newest IEEE branch by	107
		Celebration	inviting all new branches counselors	
			with lecture on processes to be followed,	
			branch vitality maintenance	

PART C - OTHERS

C.1 Special Events

- Please briefly describe the importance of special events and the outcomes achieved
- Funding secured from the IEEE and external sources including sponsorships

Hemant Sonawala Scholarship of Approx USD 1500 is given by Hinditron for needy girl engineering student. The section has been associated with various events including Solar Lighting Guinness Record, Building of a Moonshot Program for 3 days, TISP program for Mathematics teaching aid to teachers etc. Since many of these programs were done either in collaboration or IEEE initiatives funded, external sponsorship was not asked for.

C.2 Relationship with National and International Societies and Non-Government Organizations (NGO)

- Nature of relationship and details of any formal agreement signed
- Details of joint activities
- Benefit to IEEE members (for example discounts, access to technical information etc.)

• Benefit to Section (for example help in membership development, venue facilities, cost saving etc.)

There are various associations already in place with IETE, CSI, PMI, Indo-German Chamber of Commerce etc, Bombay Management Association. New relationships were not established this year. IEEE Bombay Section is a Knowledge Partner or Technical Partner and IEEE members routinely get discounts for their events.

C3. Collaboration with other IEEE Sections

- Support extended to neighboring Sections
- Joint activities with any other Section

A few DL Lectures were organized jointly with other sections in India, however no significant joint activities were done. There have been such activities initiated and are being executed in 2019.

C.4 Support extended to Sub-sections & Society Chapters within the Section

- Support extended for organising technical, educational and professional activities
- Joint activities for membership development
- Support extended for the formation of a Sub-section or transition of a Sub-section into a full Section

Subsections and Society chapters have been provided good support in terms of doing events in their sub sections, funding of events, scholarships and travel grants to subsection members. The subsections have been quite active and have shown growth in memberships as well as are vibrant. The lis of events done by subsections are listed herein.

3 / 11	D 1 1	O 1	A
Madhwa	Pradach	Subsection	A ctivities
wiadniva	1 radicsii	Dubscellon	ACHVILLOS

Madnya Pradesh Subsection Activities							
ICACAT2018	.1/27/2018 09:30 MAD	DHYA PRADESH	SILNCT,	Bhopal, Madhy	325		
CSNT 2018	.1/24/2018 09:11 MAD	DHYA PRADESH	SIRGPV,	Bhopal, Mahar	290		
International conference on Communication Systems and Network technologies	1	.1/24/2018 14:35 MAD	DHYA PRADESH	SIBhopa	l, Madhya Prad	55	
EXECOM		11/4/2018 17:06 MAD	DHYA PRADESH	SIMITS,	Gwalior, Madh	10	
IEEE Seminar 5G		11/3/2018 09:16 MAD	DHYA PRADESH	SIRGPV,	Bhopal, Madhy	300	
Stress Management	1	.0/29/2018 10:32 MAD	DHYA PRADESH	SIMITS,	Gwalior, Madh	200	
IEEE day and One day Seminar		10/3/2018 10:28 MAD	DHYA PRADESH	SVikran	t institute of Te	150	
Expert talk on corporate requirement		9/18/2018 09:34 MAD	DHYA PRADESH	SIMITS,	Gwalior, Madh	120	
One week STTP		5/29/2018 09:41 MAD				195	
EXECOM		2/11/2018 10:00 MAD	DHYA PRADESH	SIRGPV,	Bhopal, Madhy	11	
Nagpur Subsection Activities							
IEEE Nagpur Subsection 10th execom Meeting at TCS, Nagpur		12/24/2018 17:3	0 Nagpur Subs	ection	TCS, Mihan, Nagpur, I		19
Three day workshop on Micro and Nano Technology		11/1/2018 10:0	O Nagpur Subs	ection	G. H. RAISONI COLLEC		600
THREE DAY WORKSHOP ON MICRO & NANO TECHNOLOGY: A HEURISTIC APPROA	ACH BY	11/1/2018 09:3	2 Nagpur Subs	ection	CRPF GATE NO 3, NAC		61
Hands-on workshop on R Programming	9/1/2018 10:1	0 Nagpur Subs	ection	S. B. Jain Institute of		52	
AGM of IEEE Nagpur sub- Section held in Hotel Airport Center Point on August 25	5, 2018	8/25/2018 18:3	0 Nagpur Subs	ection	Hotel airport centre p		7:
IEEE workshop		8/24/2018 10:0	0 Nagpur Subs	ection	TCS, mihan, Nagpur,		9:
IGNITE 3.0 - 03rd edition of the summit organized by G.H. Raisoni College of Eng	ineerir	8/24/2018 09:3	0 Nagpur Subs	ection	G. H. Raisoni college (200
Faculty Development Program @ TCS, Nagpur		8/13/2018 10:0	O Nagpur Subs	ection	TCS, MIHAN, Nagpur,		35
Workshop on Arduino Basics and Beyond		8/11/2018 10:0	O Nagpur Subs	ection	Visvesvaraya Nationa		71
c)TechMUN 2018	8/10/2018 10:0	O Nagpur Subs	ection	S. B. JAIN INSTIUTE O		74	
IEEE Nagpur subsection- 6th Execom meeting (2018)	7/14/2018 10:0	0 Nagpur Subs	ection	TCS, Mihan, MIDC, Na	n/a		
IEEE Nagpur subsection- 5th Execom meeting (2018) with expert talks	6/12/2018 10:0	0 Nagpur Subs	ection	conference hall, Digd		202	
IEEE Nagpur Subsection - 4th executive committee meeting(2018)		4/25/2018 15:3	0 Nagpur Subs	ection	GHRCE, Greenwood A		205
IEEE Nagpur Subsection - Third executive committee meeting-2018		3/11/2018 15:0	0 Nagpur Subs	ection	s. b jain institute nagr		116
Nagpur Subsection Congress (NSSC'18)	3/10/2018 10:0	0 Nagpur Subs	ection	s. b jain institute nagr		116	
IEEE Nagpur Subsection - 2nd executive committee meeting-2018	2/22/2018 11:0	O Nagpur Subs	ection	G H Raisoni college of	n/a		
IEEE Nagpur Subsection - First executive committee meeting-2018	1/10/2018 15:0	O Nagpur Subs	ection	TATA Consultancy ser		80	

C.5 Best Practices of your Section (which you would like to share with other Sections for the benefits of members)

- 1 SKEP (Skills and Knowledge Enhancement Program) series of workshops/talks.
- 2 Formation of a Student Activities Core team spanning across the region. This has created a push amongst students to be active and also participate in more technical as well as leadership events.
- Handing over of administrative affairs to new committee was becoming a challenge due to increased reporting norms at different times and different levels like IEEE R10 & HQ, State and Central Govt. agencies. Creation of Joint Secretary, Joint Treasurer and an Additional Vice-chair helped easy transition as well as timely reporting.
- 4 Leadership statements of Vision/Mission at Annual General Meeting
- 5 Value add to members and professionals through topical Conferences

- 6 Robust Senior Member elevation practices
- 7 Reviving dormant student branches and initiating new branches
- 8 Engaging with Students, Student Branches and Counsellors
- 9 Active website, regular mailers on forthcoming events
- 10 Delivering value to members by providing fair opportunities to attend key IEEE events
- 11 Created a section video for use during IEEE functions.
- 12 Improved governance by
 - ♦ Succession planning incorporated in the formation of the Executive Committee
 - ♦ Adopting smooth hand-over processes

C.6 Problems anticipated and suggestions for solutions, if any

The focus on electronics engineering at entry level is going down in this region and many colleges are struggling. The admissions to EXTC and Electronics branches have been low and many colleges are facing closure of these departments. IEEE Bombay Section is now promoting Startup, Entrepreneurships etc and making that aware to school level students, which may help membership in the longer run.

The transition from a Graduate Student Member to YP results in a jump of membership fees by 300% (27 USD to 81). We see a significant drop of members at this level. Since this is also the first year of their job, and students are going into a new town/setup, they are reluctant to spend these kind of fees. A first year reduced YP fee structure may help retention.

PART D - GOALS AND PLANS

D.1 Continuation of project/activity in progress and their implementation plans

Bombay section s granted special budget for TISP to enhance Mathematics teaching at school level. 3 such day long workshops have been held, and many more will be undertaken in 2019

D.2 Goals and Future Plans

VISION

- Be the most preferred Technical and Professional Association for individuals in Industry, Academia and Government
- Be the Benchmark among IEEE Sections in India

ACTION PLAN

- Build on the momentum of the past years
- Firmly establish the new entity (IEEE Mumbai Section Welfare Association) and comply with all statutory obligations
- Operationalize good governance practices and simplify operations
- Enhance value of membership by conducting member development and empowerment programs
- Contribute positively to the communities we operate
- Thought leadership through original contributions in technical and professional areas of impact

4 PILLARS OF ACTION

Governance & Operations

- Set up Advisory, Finance and Statutory Compliance Committees
- Establish governance and operations processes
- Leverage website to simplify approvals, interactions
- Member Charter
- Establish registered society Infrastructure

Member Development and Empowerment

- To increase number of Volunteers
- Continuous Education and Skill Upgrade
- Technical Engagement, Networking & Exchange Programs
- Replicate programs across the section geography
- Rewards and Recognition
- Develop next-line office bearers, Execom members

Relevance to the Community

- Influence Engineering education
- Enhance Industry connect
- Invigorate SIGHT, Affinity Group and all Society Chapter activities
- Student Employability initiatives
- Enhance Faculty Effectiveness
- Drive Industry Academia collaboration
- Conduct events of Relevance IBSS 2015, SKEP at more geographies, SKEP targeted at Professional members, IPR workshops

Thought Leadership

- Leverage the intellectual capital of the section to Influence policies, standards
- Share Best (Next) practices
- Promote and publicize innovation
- Create an innovation manual
- Enhance Website, Social Media connect

D.3 Any innovative ideas to make IEEE more creative and value added for sustaining the membership retention and recruitment goals.

The section focused on IPT as a theme, along with R2IW (an IEEE New Initiatives funded program) the following activities were undertaken

- World Intellectual property day at Thakur college of Engineering & Technology on 26th April 2018
- Inauguration of Intellectual Property Cell at Thakur College of Engineering & Technology.
- IEEE IPR Event on 23rd August at IIT Bombay
- IPR Awareness program at following Schools, total 301 students participated.
- Oxford international school, Seth Vidya Mandir, Samata Vidya mandir, Oxford public school
- Environment Initiatives felicitation & Promoting Innovation and IPR at Rajiv Gandhi Institute of Intellectual Property.
- Showcasing Smarty City Solutions & smart campus posters to High Power German government Delegation
- IPR session at Somalwar School Nagpur
- IPR awareness session at Engineering colleges.
- International Connect Event
- Exposure of Indian Students to International Innovation competition: Strategic Indo-German Startup Round Table in Karlsruhe, Germany held on 13th of July.
- H.E. Dr Ajay Gondane speaks on "International Business Opportunities for Indian Businesses"
- Nomination for H2O: Sponsored Delegation to Bologna Italy
- IEEE Bombay section was promoted as partner and necessary publicity was given to promote IEEE Bombay Section. Till now around 1.8 Lakhs are spent and remaining amount will be utilized for setup of Innovation Gallery at Rajiv Gandhi Institute of Technology Nagpur.

D.4. Business Plan for Sustainable Growth and Financial Stability.

The section is currently vibrant with activities and able to break even at annual level. The section has some savings which can see through for seed funding of events and exigencies. The flagships events or larger

conferences done bi-annually do generate revenue for the section. We do not envisage any issues with financial stability or growth challenges due to lack of funds for coming 2-3 years.