

**SCHOLASTIC RECORD**

Year	Degree	Institute	CGPA/%	Remarks
2018	Doctor of Philosophy	IIT Madras, Chennai	<b>7.98/10</b>	<b>Pursuing</b>
2016	M.Tech (Electronics and comm.)	DEE,Pondicherry University,pondicherry	<b>8.96/10</b>	<b>Distinction</b>
2013	B.Tech (Electronics and Telecomm.)	S.G.G.S.I.E.& T, Nanded	<b>7.34/10</b>	<b>First Class</b>
2009	12 <sup>th</sup> (Maharashtra State Board)	S.B.E.S College of Sci, Aurangabad.	<b>75.64%</b>	<b>Distinction</b>
2007	10 <sup>th</sup> (Maharashtra State Board)	B.P Vidyalaya Aurangabad.	<b>85.53%</b>	<b>Distinction</b>

**PROJECTS UNDERTAKEN**

**PONDICHERRY UNIVERSITY,PONDICHERRY** July 2015 – December 2015

**Project Title: Design and modelling of microfluidic channel for BioMEMS application**

<b>Methodology</b>	<ul style="list-style-type: none"> <li>➤ To design a microfluidic channel for <b>BioMEMS</b> applications.</li> <li>➤ Case study of microfluidic devices in drug delivery and development, point of care diagnosis and environment monitoring</li> <li>➤ To study different cell separation techniques specially <b>Dielectrophoresis (DEP)</b> process.</li> <li>➤ To study fluid mechanics in micro channels.</li> <li>➤ Mathematical modelling of microfluidic channel by <b>COMSOL Multiphysics</b> software.</li> </ul>
<b>Deliverables</b>	<ul style="list-style-type: none"> <li>➤ Differentiation of biological cells according to their <b>dielectric properties</b>.</li> <li>➤ Separation of <b>dead cells</b> from <b>water</b>.</li> <li>➤ Optimization of channel design for <b>Dielectrophoresis (DEP)</b> application.</li> <li>➤ <b>Validation</b> of microfluidic channel by <b>hydrodynamic simulation</b>.</li> </ul>

**SGGSIE&T, Nanded** July 2012 – April 2013

**Project Title: Ultrasonic tactile reflex provision**

<b>Methodology</b>	<ul style="list-style-type: none"> <li>➤ To build as <b>autonomous system</b> for visually blind persons.</li> <li>➤ To study available technologies for visually impaired persons</li> <li>➤ <b>Modularised</b> the project in three different parts (Helmet, Gloves, and Shoes).</li> <li>➤ <b>Synthesis and Simulation</b> of embedded C-code on hardware kit</li> <li>➤ <b>Continues time evaluation</b> of software, time utilized and provide optimum algorithm.</li> </ul>
<b>Deliverables</b>	<ul style="list-style-type: none"> <li>➤ Detection of obstacles from <b>front, back, left, Right</b> sides by using rotating ultrasonic.</li> <li>➤ Acknowledgment or approximation of <b>dimension of obstacle</b>.</li> <li>➤ Acknowledgment of <b>step sizes of staircases</b> at public places, different/new environment.</li> <li>➤ <b>Prevention of skidding</b> over slippery surfaces by use of moisture sensor.</li> </ul>

**INDUSTRIAL TRAINING**

**All India Radio, Nanded**

<b>Methodology</b>	<ul style="list-style-type: none"> <li>➤ Study of <b>Radio system</b> and implementation in India.</li> <li>➤ Study <b>benefits of FM</b> over AM as replacement tool</li> <li>➤ Study <b>channel spacing</b> scheme implemented and bandwidth associated.</li> <li>➤ Study of <b>transmission area constrains</b>.</li> </ul>
<b>Deliverables</b>	<ul style="list-style-type: none"> <li>➤ <b>FM is being used in India</b> considering benefits of FM over other modulation techniques.</li> <li>➤ Specific <b>Bandwidth</b> is allotted to different channels for transmission.</li> <li>➤ Specific <b>guard bands</b> have to be inserted between two channels to avoid interference.</li> <li>➤ <b>Broadcasting is limited to an area</b> as FM has constrains over transmission while advantage of frequency reuse is benefited.</li> </ul>

**PROGRAMMING LANGUAGE SKILLS:**

	<ul style="list-style-type: none"> <li>➤ C-language, Embedded C language.</li> </ul>
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**POSITIONS OF RESPONSIBILITY**

<b>Clubs of College</b>	➤ <b>Sub co-ordinator, Research and Development-Knowledge Centre(RnD-KC)</b>
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**AWARDS & ACHIEVEMENTS**

	➤ A member of winning football team in college level competition.
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**Publications**

<b>Book Chapter</b>	Gaikwad R.S., Sen A.K. (2018) The Microflow Cytometer. In: Bhattacharya S., Agarwal A., Chanda N., Pandey A., Sen A. (eds) Environmental, Chemical and Medical Sensors. Energy, Environment, and Sustainability. Springer, Singapore
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**PERSONAL INFORMATION**

<b>Strong points</b>	➤ Dedication for work, Leadership quality, Time management, enduring.
<b>Hobbies</b>	➤ Adventures sports, sketching.

**LANGUAGE SKILLS:**

	➤ English, Marathi, Hindi, German.
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