JGi JAIN DEEMED-TO-BE UNIVERSITY | FACULTY OF ENGINEERING AND TECHNOLOGY

FACULTY INFORMATION

PERSONAL INFORMATION		
Name	Prof. Basavaraj H	
Designation	Professor	
Official Email ID	g.raju@jainuniversity.ac.in raju_garuda@yahoo.co.in	
Academic Experience	6 years	
ISRO Experience	40 years	
Core Discipline	Electronics	
Specialization	Electronics	
Research Interest	Remote Sensing and Navigation	

PROFESSIONAL QUALIFICATION		
Qualification / Discipline (Start with UG degree)	**Year of Passing**	**Institution**
Ph.D.	-	University of Kansas (KU), Lawrence, Ks, USA.,
M.Tech.	1972	Dayananda Sagar College of Engineering
BE	1970	Bangalore University

MEMBERSHIP OF PROFESSIONAL BODIES		
Professional Society	**From Year**	**Nature of Membership**
IEEE (USA) Senior Member	-	Lifetime Membership
Founder Member, Biomedical Engineering Society, Gujarat	-	Lifetime Membership
Ex - Co - Chair, IEEE Geo - Science & Remote Sensing Society, Bangalore Chapter	-	Lifetime Membership
Life Member of Astronautical Society of India (ASI)	-	Lifetime Membership
Fellow of the Institute of Electronics and Telecommunication Engineers (IETE), India	-	Lifetime Membership
Life Member of the Indian Meteorological Society	-	Lifetime Membership

SUMMARY OF RESEARCH PUBLICATIONS		
INTERNATIONAL JOURNALS		
Journal Name	**Date, Volume & Issue No (From the Latest)**	**Paper Title**
URSI AP-RASC, New Delhi, India	9th - 15th March 2019	Exploring remote sensing opportunities through GNSS – IRNSS / NAVIC missions.
International Journal of Earth Sciences and Engineering	11(03), 227 - 232, 2018	Land surface emissivity estimation by using saphir on - board megha - tropiques.
International Journal of Applied Engineering Research	ISSN:0973 - 4562 Vol 12, Number 19th 2017, pp 8115 - 8119	Acquisition and tracking of navic L5 band signals.
Proceedings of International Conference on Global Colloquium in Recent Advancement and Effectual Researches in Engineering Science and Technology (RAEREST)	2016	Comphrensive study of linear KF based techniques under ionosphere scintillation.
International Workshop on Small Satellite and Sensor Technology for Disaster Management, IISc	31st March – 2nd April 2014	L - Band ice penetrating radar on - board a small satellite.
International Workshop on Small Satellite and Sensor Technology for Disaster Management, IISc	31st March – 2nd April 2014	A low - earth orbit satellite with microwave sensors in snow / ice studies over himalayas as inputs for disaster monitoring.
International Workshop on Small Satellite and Sensor Technology for Disaster Management, IISc	31st March – 2nd April 2014	90 GHZ radiometer for measuring / monitoring snow / ice properties over himalayas.
International Workshop on Small Satellite and Sensor Technology for Disaster Management, IISc	31st March – 2nd April 2014	Spaceborne remote sensing techniques for disaster monitoring applications with emphasis on microwave sensors.
IEEE 89CH2685 - 6, Dallas	TX, 29 - 30 March 1989, pp 42 - 47	A 150 MHZ coherent radar system, proceedings of the 1989 IEEE AESS national radar conference.
IEEE Trans on Geoscience and Remote Sensing	IGARSS89 Special Issue	A matched - filter technique for removing hyperbolic effects due to point scatterers - Simulation and application on antarctic radar data.
IEEE Transactions on Remote Sensing	Vol GE 23, No. 6, November 1985, pp 933 - 940	Sea surface emission characteristics as viewed by the spin - scanned satellite microwave radiometer (SAMIR) on board bhaskara.

International Journal of Glaciology	Vol 36, No 123	Design, development, field operations and preliminary results of the coherent antarctic radar depth sounder (cards) of the university of kansas.
International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) Journal	(Print) ISSN:2249 - 6890, (Online) ISSN:2249 - 8001	Visibility aspects of Indian earth stations for near real - time Tsunami monitoring.
Proceedings of International Union of Radio Science – 3rd Regional Conference on Radio	-	Observation of tropical cyclone formation, growth and dissipation by saphir sensor.

AWARDS / HONORS / ACHIEVEMENTS		
Nature	**Year**	**Awarding Institution**
In Recognition of Valuable Contributions to Exploration and Scientific Achievements	1988	Antarctica Service Medal by US Navy
Certificate on completion of Snow - Craft / Survival School on Ross Island, Antarctica	1987	New Zealand Antarctic Research Program and US Antarctic Research Program
Certificate for Setting Foot on the Amundsen - Scott South Pole	1986	US Antarctic Research Program
J Das Gupta Gold Medal - The Best Paper on Meteorological Instrumentation	1981	Indian Meteorological Society

BOOKS PUBLISHED / MONOGRAMS		
Name	**Year**	**Description**
Coherent Antarctic Radar Depth Sounder (CARDS) - Design, Development and Results	1989	Ph.D. Dissertation, January 1989, Department of Electrical and Computer Engineering, University of Kansas, Lawrence, Kansa
Design, Development and Field Operations and Preliminary Results of the Coherent Antarctic Radar Depth Sounder (CARDS)	1988	RSL TR 6810 - 5, University of Kansas, Lawrence, Ks., USA, November
Antenna Matching Network for the Antarctic Radar - Simulation and Design	1987	RSL TM 6810 - 6, University of Kansas, Lawrence, Ks., USA, October
150 - MHz Antenna Characteristics in Close Proximity of Snow / Ice Boundary in McMurdo Sound and Ice - Stream B in Antarctica	1987	RSL TM 6810 - 7, University of Kansas, Lawrence, Ks., USA, October
System Design of the Coherent Antarctic Radar Depth Sounder (CARDS)	1986	RSL TR 6810 - 4, University of Kansas, Lawrence, Ks., USA, September
Weighting Filter for Range Sidelobe Suppression	1986	RSL Design Memo 681 - 1, July 19th, 1985, University of Kansas Center for Research Incorporations, Lawrence, Ks.

PAST POSITIONS HELD BEFORE PRESENT ASSIGNMENT		
Designation	**From - To**	**Institution / Organization**
Deputation to DLR, W - Germany	1975 & 1982	German Space Agency
Project Director	1993	Megha - Tropiques Mission
Team Lead	1989	Airborne Synthetic - Aperture Radar (ASAR) Project In ISRO
Research Student	1985	Antarctic Radar Project at The University of Kansas
Spaceborne Radiometer Development in ISRO	1972	ISRO, Ahmedabad, As Microwave Engineer / Scientist

POSITIONS HELD IN THE PRESENT ORGANIZATION		
Designation	**From - To**	**Institution / Organization**
Visiting Professor	April 2013 - Till Date	Jain (Deemed-to-be University), Faculty of Engineering and Technology

RESEARCH GUIDANCE		
Total No. of Students Guided	**Ph.D.**	**M.Phil**
8	8	NIL

RESEARCH PROJECTS		
Name of the Project	**Type of the Project (Sponsored / Consultancy / Government Funded)**	**Status of the Project (Ongoing / Completed)**
On Orbit Characterization of Spacebrone Synthetic Aperture Radar Performance Using Ground Deployed Corner Reflections (ISRO / RES / 3 / 703 / 15 - 6)	ISRO	Ongoing
Application of IRNSS Receiver in GNSS - R Reflectometery with Specific Reference to Ocean, Himalayan Ice / Snow and Land Surface (NGP)	ISRO	Ongoing
Differential Positioning Algorithms Based on IRNSS (NGP)	ISRO	Ongoing

Study and Correction of SAR Images for Ionosphere Errors at L & S Band Using IRNSS Ionosphere Data (NGP)	ISRO	Ongoing
Evaluation of L - Band SAR Data for Soil Moisture Applications (Cal - 03)	ISRO	Ongoing
Real - Time / Near Real - Time Display and Mapping of IRNSS - Generated Data From a Rover (NGP22)	ISRO	Ongoing