

Dr. S. S. Iyengar

He has received recognition for his extensive and distinguished contributions to science, technology, innovation, policy, and assisting in creating centers of excellence, as well as his accomplishments in academia, business, government, and philanthropy in India, United States, Poland, Korea, China, Peru etc..

<https://people.cis.fiu.edu/iyengar/>

<https://people.cis.fiu.edu/iyengar/wp-content/uploads/sites/2/2024/01/SSI-Contribution-to-India.pdf>



- **Dr. S.S. Iyengar** is currently the Distinguished University Professor, Founding Director of the Discovery Lab and Director of the US Army-funded Center of Excellence in Digital Forensics at Florida International University, Miami.
- He has been involved with research and education in high-performance intelligent systems, Data Science and Machine Learning Algorithms, Sensor Fusion, Data Mining, and Intelligent Systems.
- Since receiving his Ph.D. degree in 1974 from Missi. State Univ., USA, he has directed **over 65 Ph.D. students, many number of postdocs, and many research undergraduate students** who are now faculty at Major Universities worldwide or Scientists or Engineers at National Labs/Industries around the world.
- He has published more than 600 research papers, has authored/co-authored and edited 32 books (published by MIT Press, John Wiley and Sons, CRC Press, Prentice Hall, Springer Verlag, IEEE Computer Society Press, etc.) and hold various patents ranging from AI enabled forensic analysis, Information Fusion, Robotics, Sensor Networks and others to innovation and entrepreneurship and the science of countering cyber terrorism.
- **Over the lifetime, his work on distributed sensor fusion has over 5223 publication(s) and 138,976 citation(s).**
- **His h-index is 67 and is identified among the top 2% cited scholars and world scientists (from Stanford University and EBMs of JSAN journal).**

Dr. S.S. Iyengar has left an indelible mark on **India's technological landscape**, ushering in a revolutionary era with his **groundbreaking contributions** that have catapulted the nation into the forefront of cutting-edge research and development. He has effectively utilized computing to expedite scientific breakthroughs and propel advancements in computing, simultaneously catalyzing progress in computational disciplines. This has resulted in three key outcomes:

1. Enhancing scientific disciplines through the application of computational methodologies.
2. Cultivating innovative computing technologies with broader applications beyond their initial targeted domains.
3. The collaborative effort between researchers and students from various national universities, including IISc, IGCAR, NFSU, Chanakya University, PESU, RVCE, Jain University, CDAC, ISRO, NAL, Indian Statistical Institute, National Remote Sensing Agency, Mahendra University, IIT Madaras, etc., played a crucial role in the continuous discovery and development of this technology.

His notable achievements, including the prestigious **Karnataka Rajyotsava Award in 2023 (State 2nd Highest Civilian Award)** and the **Karnataka Rajya Seva Ratna Award in 2022 from the Karnataka Pressclub Council**, recognize his pioneering work across diverse sectors: **Agriculture, Sensor Technology Fusion, Healthcare, Space Applications, Nuclear Technology, and Digital Forensics/** Dr. Iyengar's work demonstrates versatility and transformative potential that has profoundly **benefited the nation and its citizens in India and Globally**.

Dr. K. Kasturirangan quoted: **"He has been cited for helping critical thinking among government agencies and how to improve quality of life in rural areas through digital means."**

"Iyengar is a source of inspiration for an entire new generation aspiring to do Research."

Advancements in Digital Forensics and Cybersecurity: Work at the NFSU, acknowledged as Institution of National Importance under the Ministry of Home Affairs (MHA), Government of India (in collaboration with VC Dr. Vyas), has strengthened India's ability to counter cyber threats. Offered training opportunities for students from rural areas. Advancements in underwater forensics have improved the overall quality of life for Indian citizen, promoting technological progress and addressing crucial challenges for a more secure and technologically proficient society.

BI Sensor Fusion Algorithm a foundational advancement in the use of sensors across a myriad of applications worldwide. **IEEE World's Best Technology award** and impacted **billions of computer users world-wide (Linux OS) and impacted millions of dollars globally**. Its significance is underscored by its reception of the **prestigious IEEE "Test of Time" award** in 2019, **awarded only once in 10 years**. This work has generated over 5223 publication(s) and 1,38,976 citation(s). The crowning achievement is publication of a book titled "Fundaments of Brooks-Iyengar Distributed Sensing Algorithm" by Pawel et al. (2020), Springer Nature.

Agriculture and Healthcare: Patented contributions have revolutionized farming practices, introducing precision and efficiency that contribute to increased crop yield and sustainable agricultural practices, directly impacting **India's food security and economic prosperity** (India Patent No: 437158). His development of an advanced sprinkler system showcases his contribution to water conservation, addressing both the needs of farmers and golf courses. Former ISRO Chairman Dr. Madhavan Nair reported in Indian Express about his work. **Pioneering contributions to IoT have revolutionized healthcare through development of Secure IoT using BI, achieving an unparalleled security effectiveness of 94%.**

Achievements in Space Applications: As the Satish Dhawan Chaired Professor at the Indian Institute of Science, played a crucial role in India's space exploration in collaboration with ISRO, guided by former ISRO Chairman Dr. K. Kasturirangan and Dr. Balakrishnan (IISc). Featured AI-enabled integrated information mining algorithms significantly improved ISRO's and NASA's space missions during the last 15 years, including the Chandrayan Mission and satellite operations. Enhanced decision-making, optimized resource allocation, increased overall mission success, solidifying India in space exploration.

Contributions to Nuclear Technology in India: Contributions at IGCAR, as the Homi Baba Chaired Professor, advanced software tools for precision and accuracy in measurements, ensuring safety and regulatory standards for Indian nuclear technology in collaboration with Dr. Baladevrai and Dr. Krishnakumar. Implemented in the policy and guidelines for precision and accuracy measurement.

Uplifting Underprivileged from Rural Areas: In addition to propelling India's future technology, philanthropic initiatives, such as NIAS MaiYa PRODIGY and the Iyengar Medical and Educational Foundation, highlight dedication to fostering talent and addressing medical conditions in India. These efforts have far-reaching effects on education, healthcare, and research, particularly benefiting underprivileged students in rural areas.

5 Decades of Contributions to India

- Presently nominated for **2024 Vigyan Shree Award** by Prof. Bimal Roy (Former Director, Indian Statistical Institute) for his contribution towards indelible mark on India's science and technological landscape development by uplifting students from rural areas.
- Dr. Iyengar was awarded the **2023 Karnataka Rajyotsava Award (Karnataka State's 2nd Highest Civilian Award)** on November 1st, 2023.



This crowning achievement acknowledges and celebrates his remarkable scientific and technical triumph that have significantly contributed to the improvement of Indian society, particularly through the effective application of his work in Forensic Sciences, Information Fusion, Robotics, Sensor Networks, Agriculture, Sensor Technology Fusion, and medical applications.

- **Karnataka Rajya Seva Ratna Award, 2022** awarded by the Karnataka Pressclub Council for his contribution to the people of India in Sensor Technology Fusion and Agriculture, Computational Medicine, and other areas.



- Received **4 honorary Doctor of Science** and recently from Siddhartha Institute of Technology (Doctor of Honoris Causa) in November 2023 and Poznan University of Technology in Poland in May 2023.



- **3 Lifetime Achievement Award**

- Lifetime contribution to the field of Digital Forensics at the international level on November 8, 2022, during the **7th Interpol Digital Forensics Expert Group (DFEG) Conference at National Forensics Sciences University, Gandhinagar, Gujarat, India.** (Vice Chancellor Dr. Jayant Vyas)



- Contribution in Research and Education in the area of Distributed Sensor System at **25th IEEE International Conference on High-Performance Computing, Data and Analytics**, Bangalore, December 2018 (Awarded by Dr. Narayan Murthy, Infosys)



- **ISAM (International Society of Agile Manufacturing) IIT-Banaras Hindu University** for his lifelong contribution to the fields of Engineering and Computer Science, December 17, 2012



- He was awarded the **Distinguished Alumnus Award of IISc** for his contribution in sensor networks (2003).



- **NRI Mahatma Gandhi Pradvasi Medal at the House of Lords in London in 2013**



- **Prestigious Times Network NRI (Non-Resident Indian) of the Year Award for 2017**

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Repeat telecast on
30th July
6:00 PM (PT)
9:00 PM (ET)

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NRI OF THE YEAR
POWERED BY Global Indian International Award

- **Distinguished CVR Award (Berkely Professor) at the Society for Design and Process Science (SDPS 2017) for his contribution to information fusion and intelligent robotics and digital forensics.**



Detailed Technical Contributions

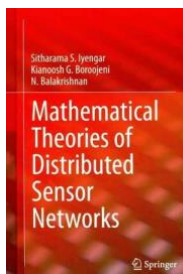
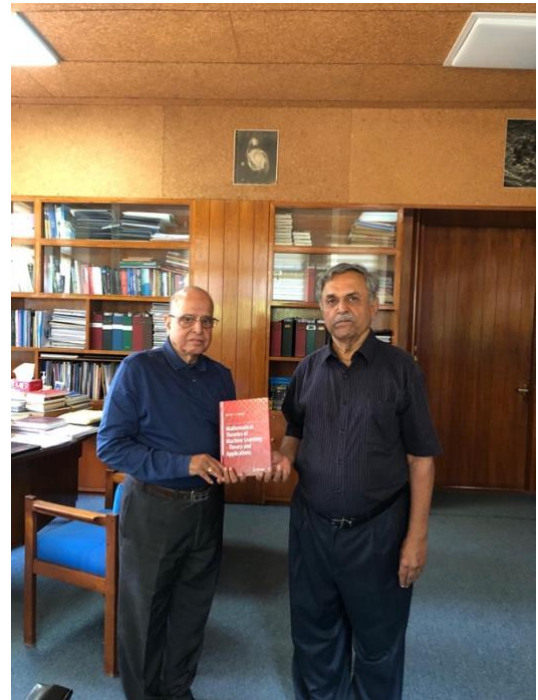
- **Indian Institute of Science**

Satish Dhawan Chaired Professor (2003-2006)

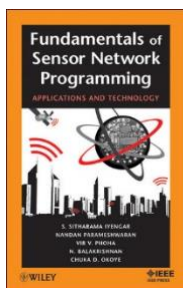
Funded by ISRO Chairman Dr. K Kasturirangan



As the Satish Dhawan Chaired Professor at the Indian Institute of Science, played a crucial role in India's space exploration in collaboration with ISRO, guided by former ISRO Chairman Dr. K. Kasturirangan and Dr. Balakrishnan (IISc). Featured AI-enabled integrated information mining algorithms significantly improved ISRO's and NASA's space missions during the last 15 years, including the **Chandrayan Mission and satellite operations**. Enhanced decision-making, optimized resource allocation, increased overall mission success, solidifying India in space exploration.



Conceptualized and Developed Mathematical Theories of Distributed Sensor Networks and Fundaments of Sensor Network Programming in collaboration with Prof. N Balakrishnan, Professor, Supercomputer Education Research Centre, IISc. Our goal was to harness sensor infrastructure resources to create technologies that would address India's information fusion and cybersecurity needs.



These groundbreaking concepts are intended to serve as a central hub for advanced research and technology development in distributed sensor networks and related fields, ultimately fostering a community of skilled researchers and experts in the country.

- **Indira Gandhi Centre for Atomic Research (IGCAR)**



Homi Baba Chaired Professor (2007-2008)

- Contributions at IGCAR, as the Homi Baba Chaired Professor, advanced software tools for precision and accuracy in measurements, ensuring safety and regulatory standards for Indian nuclear technology in collaboration with Dr. Baladevraj and Dr. Krishnakumar. Implemented in the policy and guidelines for precision and accuracy measurement.



- **Conceived and created the frameworks for Simulation of robust resonance parameters using information theory and created a sustainable toolset for Classification of radio elements using mutual information for geological mapping** in collaboration with Dr. PT. Krishnakumar under the leadership of Dr. Baladevraj (then) Director of IGCAR (2011).



- **Other activities:**

- Contributed for the development of sensor fusion and cyber security innovation program with the collaboration of Dr. Baladevraj and other lead researchers.
- Workshops, Guest Lectures and Seminars at IGCAR-Kalapakkam.
- Initiating Sensor Fusion Research Activities for secured process in Nuclear Reactors of IGCAR.
- Joint research through Scientists of IGCAR and publishing Papers in International Journals (International Journal of Applied Earth Observation and Geoinformation, Annals of Nuclear Energy etc.)

- **National Forensics Sciences University (NFSU), Gandhinagar**



National Forensic Sciences University
Knowledge | Wisdom | Fulfilment
An Institution of National Importance
(Ministry of Home Affairs, Government of India)

Distinguished Chaired Professor (2022 – Present)

- National Forensic Sciences University, Recognized as an Institution of National Importance under the Ministry of Home Affairs (MHA), Government of India, by an act of the Indian Parliament. NFSU is solely dedicated to forensic science, investigative science and criminology.
 - **NFSU under the leadership of Vice Chancellor Dr. Vyas and Director and Dean Dr. Naveen Kumar Chaudhary, is in partnership with FIU Digital Forensics Center of Excellence (CoE), the only and the first National CoE in US established in 2021 by Dr S S Iyengar, funded by US Army research office, with the objective of providing technical experience and workforce development in the area of Digital Forensics in India, US and around the world.**

- This joint summer forensic workshops have **trained over 380 of students** from various universities across the world including INDIA, USA and Poland in the field of Advanced Digital and Network Forensics.
- More Specifically, **70% of the students trained in this program are predominantly from NFSU**, India with an **approximate expenditure 3.5 crores INR** and this program is slated to run with a **roadmap for the next 5 years**.
- Digital Forensics Centre of Excellence at NFSU was recently inaugurated by Sri. Amit Sha, January 2024
- Served as a bridge connecting industries with underprivileged students hailing from suburban and rural regions. This effort led to the successful placement of approximately over 85 candidates from remote areas of Karnataka and Gujarat.



- Along with VC Dr. Vyas and Dean Dr. Chaudhary was **instrumental in organizing various national-level research and instructional workshops and conferences for students, young faculty members and researchers**, to disseminate the state-of-the-art knowledge in digital forensics at NFSU Gandhinagar, Goa and Dharwad Campuses



- Developed indigenous quantum video encryption algorithm and various other digital forensic frameworks resulting in major publications and books.
- Currently, under the Direction of Dr. Chaudhary and Dr. Vyas, a **new Visualization Framework for NFSU Cyber Defence Center (CDC)** for animating the digital crimes and forensic surveillance is being developed. - **This is the most celebrated facility at NFSU available in India for the first time.**
- Conceptualized and formulated a Joint Funding Proposal to NSF in USA and DST in India titled "Zero Trust Screen- Machine Learned Network Sniffing & Behavior Analysis for Intrusion Detection Systems"

- Developed technical indigenous Joint Funding proposal to NSF in USA and MeitY in India titled “Authentication Framework for Camera-Equipped Cyber-physical Systems”
- Provided technical knowhow on methodology and applications of Cybersecurity and Digital Forensics (Cyber Suraksha Program, January 2 & 3, 2024) and served as an adviser along with Dr. Chaudhary to the Director NFSU Dharwad Campus, Dr. Manjunath Ghate.
- More Information can be found at : <https://people.cis.fiu.edu/iyengar/wp-content/uploads/sites/2/2024/01/SSI-Contribution-to-India.pdf>

• Mahindra University



- **Spearheaded in collaboration with VC Dr. Yajulu Medury, Dr. Sartaj Sahni, a visionary initiative from 2022 to 2024, orchestrating a sequence of Indo-US workshops in the domains of Artificial Intelligence and Data Science.** These workshops acted as a cornerstone for the development of a central hub dedicated to pioneering research and the advancement of technology in AI and its affiliated disciplines. This endeavor ultimately nurtured a thriving community of highly skilled researchers and experts within our country.



• Indian Statistical Institute, Kolkata (2019-2022)



- Conceptualized and Conceived the Synergy Of Machine Learning With Quantum Computing And Communication in collaboration with Dr. Susmita Sur-Kolay and various students resulting in multiple publication in esteemed journals.
- Collaboration with Prof. Sinha



- **Jain University, Bangalore**
Distinguished Chaired Professor
(2023 – Present)



JAIN UNIVERSITY
Declared as Deemed-to-be University u/s 3 of the UGC Act, 1956

- **Instrumental in initiating and launching the Cybersecurity program** under the leadership of Chairman Dr. Chenraj Roychand and Prof. Dattaguru. This program strengthened the institution's security measures and is aimed at preparing future cyber warriors of India for the growing digital security challenges.
- Along with Prof. Dattaguru, acted as a liaison between prominent corporate industries and academic institutions and hosted a seminal workshop on Industry 4.0, 2023.
- Pioneered research and fostered global partnerships in the realms of Artificial Intelligence and digital forensics, resulting in increased recognition and the inclusion of disadvantaged Indian students on an international stage.

- **Chanakya University, Bangalore**
Distinguished Chaired Professor (2023 – Present)



CHANAKYA
UNIVERSITY

- Chanakya University is established as a pioneering exemplar of the vision of a university as elucidated in the National Education Policy 2020. It is a multi-disciplinary institution committed unflinchingly to the service of society through excellence in teaching, development of knowledge, and direct contributions in the world of practice.
- Chanakya University, under the leadership of Dr. MK Sridhar, Dr. Yashwantha Dongre and Dr. Yogananda, **is in partnership with FIU Digital Forensics Center of Excellence (CoE)**, to collectively provide technical knowhow and hands on training to disadvantaged students in India.
- Under the leadership of Dr. Dongre, initiated the establishment of Artificial Intelligence Science Centre – one of a kind AI Discovery Lab for the students and faculty of India (In-Progress).

- **PES University, Bangalore**
Distinguished Chaired Professor (Present)




- Developed technical indigenous Joint Funding proposal to NSF in USA and MeitY in India titled “Authentication Framework for Camera-Equipped Cyber-physical Systems”

Other Contributions in India

Dr. Iyengar connected (MoU) 215 universities, 115+ engineering colleges, 45+ non-technical Institutions of India with US universities.

- **MHRD Sponsored Program under UGC - GOI-** from Foreign University Experts - to Faculty drawn from South India Engineering Colleges, Organised by BMS College of Engineering, E&C Department, Bangalore : **Towards Safe Cities - 5 days workshop - 300 pages Volume of the workshop was brought out for participants**
- The Joint pioneering Projects with **IIM-Ahmedabad. Initiated and developed Prosumer Driven Integrated Smart Power Grid** in collaboration with Dr. Amit Garg and others- with

various power transmission and distribution **companies in Gujarat Area and MSRIT-FIU** different components of work to get a **PROSUMER GRID** finally. 2017-2018

- **Workshops in ISRO**, some examples are as following:
 1. NRSC- Hyderabad on Data Mining Techniques for three days continuously
 2. Network Programming -NRSC- 2003
 - Talks at various centres of ISRO:
Some examples:
 1. RRSC-Bangalore
 2. ISRO Head Quarters Bangalore
 3. ISAC (now called URSAC) Bangalore - 2000-01
- 
- **Regional Centre VTU-Bangalore - Collaborative proposals** with GKVK-Dharawar Campus - Agricultural Engineering and Computer Science Departments of BVB (which is in VTU) for Sensor Networks for Precision Agriculture and Paddy Crop Monitoring.
 - **Scientific technical advisor to “PARAM” country’s noble science centre** developed by **Rashtriya Seva Samiti, Bangalore, INDIA** in collaboration with Sri. Mukund JI, Joint General Secretary, RSS.
 - Collaborative programs on *High Performance Computing with CDAC*- Bangalore
 - Programs initiated at **Bangalore University**- Distributed Sensor Networks 2011-12, Cyber Security 2016-17 /Digital Forensics 2021 – 2024
 - Several Programs initiated at **RVCE -Bangalore** between - 2012-2024 IoT Laboratory and AI program establishment; IEEE International Conferences
 - **Malnad College of Engineering Hassan**-2010- Setting up the Center of Excellence- “ Iyengar Center of Robotics” and guiding them for five years
 - **Sahyadri College of Engineering and Management** -SCEM-Mangalore 2016-17; One year collaboration to prepare *Syllabus for AI-ML Graduation Course* (BE Course) .The faculty from SCEM - Mangalore visited FIU -MIAMI- to see Discovery Lab,Tech Innovation Lab, FINDS center etc.
 - **Karunya Institute of Technology and Sciences (KITS) (Deemed to be University)** , Coimbatore, Tamilnadu- Workshop on Distributed Sensor Networks and Multi-Sensor Fusion 2012-13- KITS Professors/Administrators (registrar) were invited to FIU-MIAMI-USA and few Post Graduation Programs were initiated by preparing appropriate syllabus [*PG Diploma and PG Programs on Urban Landscape Design*]
 - **SIT University / Siddhartha University -Tumkur** guidance on *evaluating Computer Science Courses – Science without borders program brought over 15 undergraduate students to USA for 3 month summer internship*

Contribution towards Startups in India

- Dr Iyengar, Chief Scientific Advisor of ProDiscover, Hyderabad. Under the leadership of Mr. Nrupul Rao developed world-class AI based digital forensic software used in India, USA etc.
- Dr Iyengar, Chief Scientific Advisor of M/s Xiphias Software Technologies (<https://www.xiphiasfec.com/>) has **transferred Technology of fault tolerant sensor based irrigation to University of Agriculture sciences, Bangalore for its farming deployment to achieve More crop per drop.** Dr Iyengar is also contributing to the development of Xpay through this company.
 - Patented contributions have revolutionized farming practices, introducing precision and efficiency that contribute to increased crop yield and sustainable agricultural practices, directly impacting **India's food security and economic prosperity** (India Patent No: 437158). His development of an advanced sprinkler system showcases his contribution to water conservation, addressing both the needs of farmers and golf courses. Former ISRO Chairman Dr. Madhavan Nair reported in Indian Express about his work. **Pioneering contributions to IoT have revolutionized healthcare through development of Secure IoT using BI, achieving an unparalleled security effectiveness of 94%.**
 - Dr. Iyengar, serving as the Chief Scientific Advisor at Xiphias Software Technologies in Bangalore, has recently **secured a patent** for the innovative concept of ‘**Kiosk for Automated Soil Testing**’.
 - The research conducted by the collaborators, including Dr. Leena, **received funding from Gandhi Krishi Vigyana Kendra (GKVK) in Bangalore, India.** The pivotal component of this **cutting-edge system is the Brooks-Iyengar Algorithm, which has been developed to revolutionize the process of analysing soil composition.**
 - Under Dr. Iyengar’s leadership, Xiphias Software Technologies has made significant strides in the field of agricultural technology by introducing an advanced and automated approach to soil testing.
 - **The recently patented system not only streamlines the traditionally labor-intensive soil testing procedures but also enhances accuracy and efficiency through the incorporation of the Brooks-Iyengar Algorithm.**
 - **The Brooks-Iyengar Algorithm, developed by Dr. Iyengar, serves as the backbone of the entire soil testing system.** Its intricate design and intelligent processing capabilities enable the software to analyze soil samples with a high level of precision.

- This breakthrough technology is poised to redefine the agricultural industry's approach to soil analysis, providing farmers and researchers with a reliable and rapid solution for assessing soil quality and composition.
 - As the Chief Scientific Advisor, Dr. Iyengar's expertise and dedication have played a pivotal role in the successful development and implementation of the Automated Soil Testing system.
 - This innovative technology not only showcases Xiphias Software Technologies' commitment to pushing the boundaries of scientific exploration but also underscores Dr. Iyengar's contribution to advancing agricultural practices through the integration of sophisticated algorithms and automation.
 - The patent secured for Automated Soil Testing stands as a testament to the company's commitment to excellence and its continuous pursuit of groundbreaking solutions in the realm of agricultural technology.
- He is also the **Scientific advisors for over 50 start-up companies** around the globe and some of them have become very well-known.

Philanthropy

- **MaiYa PRODIGY - Mentoring to Attain International Youth Achievement in Mathematics, Applied Science, Technology, Engineering and Research (MASTER) for great MINDs.**
<http://identifyingtalents.org/>
 - NIAS Maiya Prodigy Fellowship program mission is in search of the next Srinivasa Iyengar Ramanujan. This mission began in the presence of **Dr. C.N.R. Rao, Dr. A.S. Kiran Kumar, Dr. Baldev Raj, Former Chairman, NIAS; Dr.S.S.Iyengar, and Dr. A.H. Rama Rao, Chairman, National College.**



- The NIAS MaiYa Prodigy Fellowship program is an **important collaboration of Iyengar Medical and Educational foundation, National Institute of Advanced Studies (NIAS), IISc Campus, Bengaluru, India, and National College, Bengaluru, India.**
 - The program targets to **identify talent at grades X and XII** and embark on an active mentoring initiative to accelerate youth achievement in promoting the development of India's Gifted Youth.
 - This program is continuing its tradition of seeking and developing the **best talents in India.**
 - For Four Years, the students from Southern Indian Region were selected based on tests / interview at their respective schools and at NIAS finally before awarding them **scholarships (Rs. 50,000 each)** and mentoring through student projects.
- **Iyengar Medical and Educational Foundation (IMEF)**

<http://iyengarmedicalfoundation.com/>



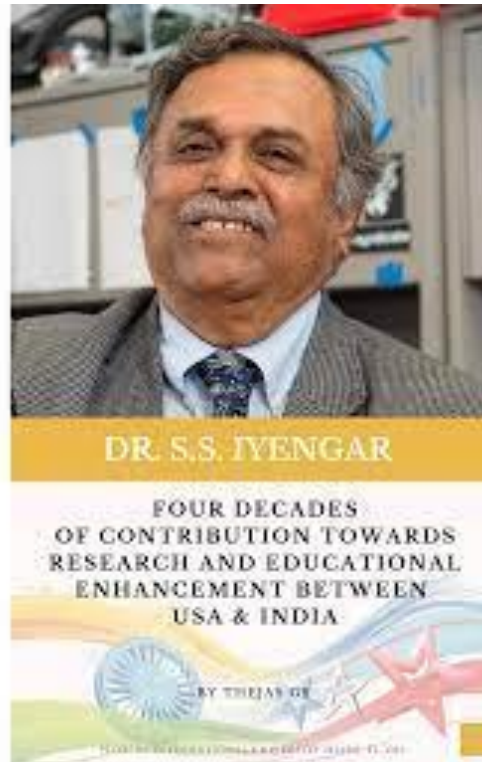
- The IMEF for India works as a non-profit organization raising funds for education, prevention, research, and treatment of multiple medical conditions - cancer, infectious diseases, cardiovascular disease, mental health, and endocrine disorders / diabetes - in India.
- Various Free Medical Camps for underprivileged rural people in Karnataka.
- Free Medical Screenings
- Research - One of its invention in the field of engineering and medical is “A device to indicate pressure in the eye due to GLAUCOMA” – US Patent Received

- Device enables a person to see for himself changes in Intra Ocular Pressure when he looks at his eye in the Mirror, in the routine course of everyday, as everyone likes to see his Own face and eyes in the Mirror every day

For more information please refer to

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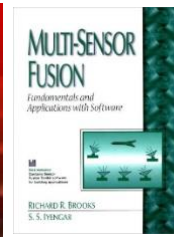
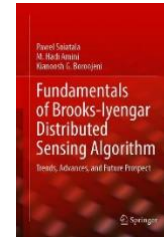


Contributions to US National Labs

- He has been an advisor/scientific collaborator for Jet Propulsion Lab (Dr. Chuck Weisbin), Oak Ridge National Lab (Dr. Nagi Rao, Dr. Jacob Barhen, Dr. Chuck Weisbin) on autonomous robot systems and AI learning for over a decade (1985-2000), US Naval Research Laboratory (Dr. Holyer, Dr. Mathew Labanon) (2000-2015), Los Alamos National Lab (Dr. Lakshman Prasad and Dr. Ramana Rao), NASA, Green belt, Mary Land, developed a system called DAVID (Distributed Access View System) (Dr. Barry Jacobs, Dr. Press) (1986-1990) (The Distributed Access View Integrated Database (DAVID) System, which was adopted by the Astrophysics Division for their Astrophysics Data System, is a solution to the system heterogeneity problem. The heterogeneous components of the Astrophysics problem is outlined. The Library and Library Consortium levels of the DAVID approach are described. The 'books' and 'kits' level is discussed. The Universal Object Typer Management System level is

described. The relation of the DAVID project with the Small Business Innovative Research (SBIR) program is explained.)

- The book titled “**Fundamentals of Brooks-Iyengar Distributed Sensing Algorithm**” authored by Prof. Pawel (Poland) and others and published by Springer in 2020 celebrates S.S. Iyengar's accomplishments.
 - Led to his 2019 Institute of Electrical and Electronics Engineers' (IEEE) Cybermatics Congress “**Test of Time Award**” for his work on creating Brooks-Iyengar Algorithm and its impact in advancing modern computing.
 - **This award is garnered only once in 10 years.**
- **Co-Inventor of The Cognitive Information Processing (CIM) Research Tool for Predicting Rare Events from Data Sets** (<https://cacm.acm.org/news/91343-lsu-scientists-develop-new-efficiency-software/fulltext>)
- His work has been featured on the cover of many scientific journals like IEEE transactions and the **National Science Foundation’s breakthrough technologies report to the US Congress** by his research group in both **2014 and again in 2016.**
- He has served on many scientific committees and panels worldwide and has served as the editor/guest editor of various IEEE and ACM journals.
- During the last thirty years Dr. Iyengar has brought in over 65 million dollars for research and education. More recently in Spring 2021, Dr. Iyengar in collaboration with HBCUs were awarded a **\$2.25 M funding for setting up a Digital Forensics Center of Excellence** over a period of 5 years (2021-2026).
- He has received **Four Honorary Doctor of Science (Doctor of Honoris Causa)**
- He has been awarded **Three Lifetime Achievement Awards** for his contribution to various computational areas.
- **Dr. Iyengar is a**
 - **Member of the European Academy of Sciences**
 - **Member of the European Academy of Arts and Sciences**
 - **Life Fellow of the Institute of Electrical and Electronics Engineers (IEEE)**
 - **Fellow of the Association of Computing Machinery (ACM)**
 - **Fellow of the American Association for the Advancement of Science (AAAS)**
 - **Fellow of the Society for Design and Process Science (SDPS)**
 - **Fellow of the National Academy of Inventors (NAI)**
 - **Fellow of the American Institute for Medical and Biological Engineering (AIMBE).**
- He has received over 125 national and international awards, Below is a selected list:
 - Nominated for **2024 US National Inventors Hall of Fame and 2024 Florida Inventors Hall of Fame**
 - **Crowning Test of Time Research** (for his seminal work which has impacted billions of computer and internet users worldwide) and Scholarly Contribution Award from 2019 IEEE Congress on Cybermatics,
 - **NASA Summer Faculty Fellow at JPL, Caltech and ORNL**
 - **Distinguished Fulbright Scientist**
 - **IEEE Meritorious Service award**
 - **Florida Innovation-2-Industry Award**
 - **LSU Distinguished Rain Makers for Leadership and Research Award**
 - **World’s Best Technology Showcase award**



- **Technology Innovation Award**
- **Louisiana Tech University Research Foundation Inventor Award**
- **Distinguished LSU Research Master Award**
- **IBM Distinguished Faculty Award**
- **IEEE Computer Society's McCluskey Technical Achievement Award, 1998**
- **IEEE Golden Core Member**
- **IEEE Distinguished Visitor**
- **SIAM Distinguished Lecturer**
- **ACM National Lecturer**
- In 2006, his paper entitled, A Fast-Parallel Thinning Algorithm for the Binary Image Skeletonization, was the most frequently read article in the month of January in the International Journal of High-Performance Computing Applications.

Funding for Research

- **His research has been funded by** National Science Foundation (**NSF**), Defense Advanced Research Projects Agency (**DARPA**), Multi-University Research Initiative (**MURI Program**), Office of Naval Research (**ONR**), Department of Energy / Oak Ridge National Laboratory (**DOE/ORNL**), Naval Research Laboratory (**NRL**), National Aeronautics and Space Administration (**NASA**), US Army Research Office (**URO**), and various state agencies and companies.
- He has **served on US National Science Foundation and National Institute of Health Panels** to review proposals in various aspects of Computational Science and has been involved as an **external evaluator (ABET-accreditation)** for several Computer Science and Engineering Departments across the country and the world.
- Dr. Iyengar has also served as a research proposal evaluator for the National Academy.
- Dr. Iyengar has been a **Visiting Professor or Scientist** at **Oak Ridge National Laboratory, Jet Propulsion Laboratory, Naval Research Laboratory, and a professorship at the University of Paris-Sorbonne.**