

# **RISE KRISHNA SAI** GROUP OF INSTITUTIONS - ONGOLE

Aavishkar - 2021

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



#### FACULTY:: DEPARTMENT OF CSE



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Mrs. K. SRIVIDYA M.Tech ASSISTANT PROFESSOR

Dr. K.SURESH BABU Ph.D PROFESSOR & HOD



Mr. G. KISHORE, M. Tech ASSOCIATE PROFESSOR



Mr.A.SATYA RAJ M.Tech ASSOCIATE PROFESSOR



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Mr. R. V. SUBBAIAH M.Tech ASSOCIATE PROFESSOR



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Miss. P.ANUSHA M.Tech ASSISTANT PROFESSOR



Mr. V.RAJA SEKHAR M.Tech ASSISTANT PROFESSOR



Mr.B.KIRAN KUMAR M.Tech ASSISTANT PROFESSOR



SHAIK SAMJEEDA M.Tech ASSISTANT PROFESSOR

# VIBRANT VOICES OF Scintillating Seven !



"India needs disciplined youths. Today's students cultivate youthful idealism in them to discharge their tomorrow's responsibilities. Art and science should be synchronized in their performance"

- Dr.Sidda Venkateswara Rao, Chairman

Indian professionals have to demonstrate their scholarship to prove their unique talents. They have to represent our nation's worth too. Sharpening their academic, personal, career and leadership skills must be their first task in the process of their career journey. I, as the Hon'ble Chairman of the RISE Krishna Sai Groups, am committed to provide our students with the best possible facilities. - Sri.I.C. Rangamannar, Hon'ble Chairman





"If information alone is education today's students require no assistance at all to make strides in their fields. Technological devices can be their best sources of learning. But there is a lot to learn on the part of student besides academic information. Character building ought to be one of the cardinal objectives of education. I give importance to education based on character."

- Sri.Sidda Surya Prakasa Rao, Vice- Chairman

Organizations can stand in the forefront of success only when the invite employees possessing impressive human values. Success on the part of an individual employee does not simply mean the currency one receives. It also means the employee's determined dedication to stand by the vision of the organization. Value-based career life is the ultimate achievement one ought to aspire for. I put all my efforts to prove that the RISE students do inculcate among themselves the right human values besides professional talents.



- Sri.Sidda Hanumantha Rao, Secretary & Correspondent



"We are nurturing the best possible qualities among our students right from the first day of their entry into our campus. We are striving to become a solution spot for all parents and students to see their success in reality. We want to be in happy association with our students and a parent since one of our cardinal aims is to be a part of their excellence."

- Sri. Sidda Bharat, Treasurer

"Successful professional education should pave the way for successful career. We, therefore, focus more on sharpening our students' wholesome progress in our campus. We train our students to be self-reliant with respect to enrichment of their profile. We are confident that our students are sure to prove their skills and adapt themselves to all global standards and expectations. We are committed to facilitate ultimate satisfaction to our students, parents and



professionals." - Dr. A.V.Bhaskara Rao, M.Tech., Ph.D (IIT Bombay), Post-Doc (Canada), Director



Teaching is accorded wholesome meaning only when it is followed by the closest possible watching of the students' behaviour. we are committed to teachand watch our students with devotion. ours is the 'NO-Compromise' attitude tobring the best out of our professional students. parents' aspirations are our best companious.
 Dr K.V.Subramanyam, ME,PhD.MISTE,FIE,FIETE Principal RISE Krishna Sai Gandhi

The department of Computer Science and Engineering (CSE) established in 2009 offers a four year undergraduate programme intake of 120 students and post graduate programmes in CSE and CS with an intake of 24 students every year. Manned by a strong faculty of 27 members, the department possesses highly advanced hardware and software tools. The department provides ample opportunities to students to work on mini projects, develop communication skills, explore internship opportunities in industry and take active participation in national and international design contests.

The laboratories are well equipped with modern training facilities that cater to the requirements of the university syllabus. The department plays a vital role in training students of other branches of engineering too.

#### CHIEF EDITOR.

#### Dr. K. SURESH BABU

Professor & HOD

**CO-ORDINATOR** 

#### **RAJESH DASARI**

Associate. Professor



#### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS::ONGOLE

# **VISION**

To be a center of excellence in Computer Science & Engineering for value based education to serve humanity and contribute for socio-economic development.

# **MISSION**

- > Provide professional knowledge by student centric teachinglearning process to contribute software industry.
- > Inculcate training on cutting edge technologies for industry needs.
- > Create an academic ambience leading to research.
- Promote industry institute interaction for real time problem solving.

#### **Program Educational Objectives (PEOs)**

- **PEO 1:** Develop software solutions for real world problems by applying Mathematics, Science and engineering principles.
- PEO 2: Function as members of multi-disciplinary teams and to communicate effectively using modern tools.
- **PEO 3:** Pursue career in software industry or higher studies with continuous learning and apply professional knowledge.
- **PEO 4:** Practice the profession with ethics, integrity, leadership and social responsibility.

# Program Specific Outcomes (PSOs):

- **Domain Knowledge:** Apply the Knowledge of Programming Languages, Networks and Databases for design and development of Software Applications.
- **Computing Paradigms:** Understand the evolutionary changes in computing possess knowledge of context aware applicability of paradigms and meet the challenges of the future.

# **Program Outcomes:**

PO No	Description					
PO1	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.					
PO2	<b>Problem analysis:</b> Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.					
PO3	<b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.					
PO4	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.					
PO5	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.					
PO6	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.					
PO7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.					
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.					
PO9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.					
PO10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.					
PO11	<b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.					
PO12	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.					

#### **Articles:**

#### **Artificial Intelligence Qualities:**

Artificial intelligence (AI) is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment.

Most people are not very familiar with the concept of artificial intelligence (AI). As an illustration, when 1,500 senior business leaders in the United States in 2017 were asked about AI, only 17 percent said they were familiar with it. A number of them were not sure what it was or how it would affect their particular companies. They understood there was considerable potential for altering business processes, but were not clear how AI could be deployed within their own organizations.

Despite its widespread lack of familiarity, AI is a technology that is transforming every walk of life. It is a wide-ranging tool that enables people to rethink how we integrate information, analyze data, and use the resulting insights to improve decision making. Our hope through this comprehensive overview is to explain AI to an audience of policymakers, opinion leaders, and interested observers, and demonstrate how AI already is altering the world and raising important questions for society, the economy, and governance.

In this paper, we discuss novel applications in finance, national security, health care, criminal

justice, transportation, and smart cities, and address issues such as data access problems, algorithmic bias, AI ethics and transparency, and legal liability for AI decisions. We contrast the regulatory approaches of the U.S. and European Union, and close by making a number of recommendations for getting the most out of AI while still protecting important human values.

- In order to maximize AI benefits, we recommend nine steps for going forward:
- Encourage greater data access for researchers without compromising users' personal privacy,
- invest more government funding in unclassified AI research,
- promote new models of digital education and AI workforce development so employees have the skills needed in the 21st-century economy,
- create a federal AI advisory committee to make policy recommendations,
- engage with state and local officials so they enact effective policies,
- regulate broad AI principles rather than specific algorithms,
- take bias complaints seriously so AI does not replicate historic injustice, unfairness, or discrimination in data or algorithms,
- maintain mechanisms for human oversight and control, and
- penalize malicious AI behavior and promote cybersecurity.

# I. QUALITIES OF ARTIFICIAL INTELLIGENCE

Although there is no uniformly agreed upon definition, AI generally is thought to refer to "machines that respond to stimulation consistent with traditional responses from humans, given the human capacity for contemplation, judgment and intention." According to researchers Shubhendu and Vijay, these software systems "make decisions which normally require human level of expertise" and help people anticipate problems or deal with issues as they come up. As such, they operate in an intentional, intelligent, and adaptive manner.

#### Intentionality:

Artificial intelligence algorithms are designed to make decisions, often using real-time data. They are unlike passive machines that are capable only of mechanical or predetermined responses. Using sensors, digital data, or remote inputs, they combine information from a variety of different sources, analyze the material instantly, and act on the insights derived from those data. With massive improvements in storage systems, processing speeds, and analytic techniques, they are capable of tremendous sophistication in analysis and decision making.

#### Intelligence:

AI generally is undertaken in conjunction with machine learning and data analytics. Machine learning takes data and looks for underlying trends. If it spots something that is relevant for a practical problem, software designers can take that knowledge and use it to analyze specific issues. All that is required are data that are sufficiently robust that algorithms can discern useful patterns. Data can come in the form of digital information, satellite imagery, visual information, text, or unstructured data.

#### Adaptability:

AI systems have the ability to learn and adapt as they make decisions. In the transportation area, for example, semi-autonomous vehicles have tools that let drivers and vehicles know about upcoming congestion, potholes, highway construction, or other possible traffic impediments. Vehicles can take advantage of the experience of other vehicles on the road, without human involvement, and the entire corpus of their achieved "experience" is immediately and fully transferable to other similarly configured vehicles. Their advanced algorithms, sensors, and cameras incorporate experience in current operations, and use dashboards and visual displays to present information in real time so human drivers are able to make sense of ongoing traffic and vehicular conditions. And in the case of fully autonomous vehicles, advanced systems can completely control the car or truck, and make all the navigational decisions.

> By Mr. D Rajesh Assoc. Professor

#### Smart technologies and cities

Technology is a key component of urban evolution towards sustainability. The Smart Technologies and Cities section publishes highquality fundamental and applied research in all aspects of technology that contribute to solutions to cities' sustainability and livability challenges. Urban-scale challenges require a breadth of potentially interacting novel technologies, including sensors that provide real-time data about a city, technologies that communicate and analyze that data to provide knowledge, and technologies that facilitate change based on that knowledge. Furthermore, these novel technologies need to consider ethics, privacy and security.

Areas covered by this section include, but are not limited to:

- Smart mobility systems
- Smart buildings
- Smart urban waste management
- Smart urban water management
- Smart urban pollution management
- Smart energy management
- Smart health-care
- Technologies for data/knowledge collection in cities
- Technologies for analysis of urban data
- Technologies for enabling decisionmaking in city management
- Technologies for enabling actuation of city management decisions
- Citizen engagement in smart technologies

   their design, evaluation, deployment and use
- Technologies for crowdsourcing
- Ethical decision-making using smart technologies
- Technologies for privacy and security of citizen's data
- Technologies for equity

The focus of this section is on technologies that go beyond the state of the art in sensors, actuators, Artificial Intelligence, information management, decision support and prediction.

> By G Satish Kumar Assoc. Professor

### **LABORATORIES**



# **COMPUTER LAB – I**



**COMPUTER LAB – II** 



**COMPUTER LAB – III** 

S. No	Name of the Event	No. of Events	No. of Participants	No. of Won/Award/Reward /	Level
1	Paper Presentation	7	15	3	National
2	Poster Presentation	4	17	1	National
3	Coding & debugging	5	18	4	National
4	Quiz	1	7	0	National

#### Summary of Awarded & Participated Students 2019-20

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