SEM DIGEST

ATRIA
INSTITUTE OF TECHNOLOGY

Volume - 6

April - August
2021

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MESSAGE FROM MANAGEMENT

Shri. C.S. Sunder Raju is a Trustee and Chairman of the Governing Council of Atria Institute of Technology.

He is a Director of Atria Power Corporation; the company is into Hydro, Wind and Solar power generation. He started Atria Convergence Technology; a leader in broadband ISP service across the country. Mr. Sunder Raju has been involved in various activities that have contributed to the social capital. Mr. Sunder Raju was appointed to the Prime Minister council for skill development. Mr. Sunder Raju's contribution to Karnataka State Lawn Tennis Association (KSLTA) as Secretary is recognized nationally. He believes the next generation of learning experience has to be created beyond the classic classroom instruction formats.

We have to not only nurture their curiosity but also inculcate the rigor and skills of framing a problem, finding resources, creating solutions, communicating, and galvanizing opinion. We need to revisit the evaluation process in a way that the learner can truly assess her own maturity and proficiency by going beyond scores in exams and one-off projects. The goal is to empower citizens of tomorrow to navigate the fast-paced disruptions the future portends. Most importantly, we are committed to fostering a tribe united by mindsets and beliefs that can go out, navigate, and change tomorrow's world for the better, on their own terms. Distilled to its core, the underlying theme is "**Learning to learn**", 24/7 and 365 days a year, at the student's choosing.

Shri. C. S. Sunder Raju
Chairman, Atria IT

Our institute is committed to its vision "**To be a premier technical and management institute that provides transformational learning and multi-disciplinary research to develop socially conscious and competent professionals**"

The students are always encouraged to focus on industry exposure through company research projects, industry visits, and guest lectures. They are provided ample opportunities to participate in extra co-curricular activities. We believe in emphasizing more on Student Centric Learning. Today, our alumni are holding senior positions in many organizations and more students are joining each year at various levels to contribute meaningfully to the corporate world. Leading brands name like Accenture, Amazon, Axis Bank, Ernst & Young, J P Morgan IBM, Infosys, TCS, Dell, Mindtree, Bosch, Goldman Sachs, L&T capital, and many others have offered placement opportunities to our students in the past. We focus to nurture professionals who can add value to organizations and pursue innovative entrepreneurial opportunities and aim to provide best-in-class infrastructure to facilitate experiential learning in cutting-edge technologies.

Dr T. N. Sreenivasa
Principal, Atria IT

Message From Head of Department

Welcome to the Department of Electronics and Communication Engineering (ECE) at Atria Institute of Technology, Bengaluru. We started our journey in the year 2000. The ECE Department offers Bachelor in Engineering, in Electronics and Communication Engineering and Masters in Technology, in Digital Electronics & Communication. Over the last two decades, the ECE Department has recorded a consistent improvement in its academic, research and placement performance. It offers a range of add-on programs to meet the changing requirement of the industry and to meet the needs of major stakeholders. We believe that our students have been well accepted in their job profiles and have consistently exceeded expectations of the corporate world.

Our students learn and be equipped for a career in the Interdisciplinary Digital Economy of tomorrow, incorporating in-demand skills like the Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML), Robotics, Very Large-Scale Integrated Devices, Nano Electronics, Wireless Networks etc. The department has well qualified and experienced faculty from reputed institutes. Department is equipped with multiple laboratories under the VTU curriculum for the practical exposure of the Electronics and Communication Engineering branch. A dedicated group of faculties train students as per the industry requirements like VLSI, Embedded, Signal Processing and Communication. The Centre of Excellence (CoE) for the Internet of Things (IoT) is available for students to explore their creative minds, develop solutions on Industrial IoT Gateway, Self-sustainable Hydroponics Monitoring Systems, Smart Campus Solutions, etc. The students are also encouraged and supported for the preparation for GATE/GRE/PSUs examinations other than their routine studies. The department has a close networking relationship with professional bodies such as IEEE, IETE, ISTE and experts from leading institution to excel their knowledge to our department students in the various emerging fields of electronics and communication engineering. In the future, the department plans to extend its research into new areas like Biomedical Signal and Image Processing and Smart Devices.

"The focus of the department is to provide a better campus-based educational experience to the students for developing their learning interest and critical thinking to increase competencies in them."

Dr. Arun Balodi
SM'IEEE, F'IETE, LM'ISTE
PhD. Indian Institute of Technology, Roorkee,
M. Tech. (Gold Medalist)

THE HIDDEN GEMS

The key to getting to know a city comes with using its public transportation, and **Mr. E. Shreedharan** aimed to let the people do just that.

Titled "The Metro Man of India", he put forth groundbreaking work which helped transform public transport across India.

Born in Karukaputhur, Palakkad district, Kerala, E. Shreedharan attended primary and secondary schooling at his hometown and went on to complete his Civil Engineering degree from the Government Engineering College, Kakinada in Andhra Pradesh.

Mr. E. Shreedharan has been majorly involved in several public transport projects ranging from Kolkata to Delhi to Lucknow to his home state of Kerala.

Starting out as a lecturer at the Government Polytechnic, Kozhikode, he quickly moved to the Indian Railway Service of Engineers to offer his full services to the country.

In 1970, as deputy chief engineer, he was put in charge of the planning, design and **implementation of India's first Metro, the Calcutta Metro,** regarded as one of the most technologically advanced projects undertaken in India. In completing this massive project, he laid down the fundamental foundations of modern infrastructure engineering in India.

Shreedharan joined the Cochin Shipyard in 1979, where he quickly rose in ranks to Chairman and Managing director. In 1981, under his leadership, he ensured the Cochin Shipyard produced their first ever Ship, the Rani Padmini.

E. Shreedharan has played a pivotal role in the design and implementation of the Konkan Railways, the Delhi Metro, the Kochi Metro and currently, the Lucknow Metro. Under his guidance, the Lucknow metro is said to be completed in a period of just 2 years and 9 months, the fastest in India and the world to date.From teaching to planning, guiding and implementing his ideas to revolutionise the Indian public transport system, Mr. E Shreedharan accomplished a multitude of achievements and due to his many incredible accomplishments, he has been awarded several prestigious awards including the Railway Minister's Award, for his work in restoring the Pamban bridge following the cyclone of 1964. What was targeted to be a 6 month restorative project was completed in just under 46 days under his supervison.

Amongst several others, he was awarded the **Padma Vibhushan award, the Padma Shri award, was claimed "One of Asia's Heroes" by TIME magazine and "The Man of The Year"** by the Times of India in 2002.

FACULTY
SPACE

Sanskrit Quotations

उद्यमेन हि सिध्यंति कार्याणि न मनोरथैः । नहि सुप्तस्य सिंहस्य प्रविशांति मुखे मृगाः।

The efforts and hard work give results and success in an endeavor. Merely building castles in the air and wishing for achieving some goal will not be sufficient. Just like a deer will not enter a sleeping lion's mouth on its own. So not wishful thinking but efforts yield results.

वाणी रसवति यस्य, यस्य श्रमवती क्रिया। लक्ष्मीः दानवती यस्य ,सफलम तस्य जीवितम्।

The qualities of an A person who can be called be successful in life are, his speech is gentle, his actions are persevering, and his wealth is for charity.

अभिवादनशीलस्य नित्यम वृद्धोपसेविनः।चत्वारि तस्य वर्धन्तै, आयुर्विद्यायशोबलम् ।
The one who greets and serves the elderly is always blessed with long life, knowledge, fame glory, and wealth.

हस्तस्य भूषणम् दानम्, सत्यम् कंठस्य भूषणम् । श्रोत्रस्य भूषण शास्त्रं, भूषणैः किम् प्रयोजनम्।

For a hand the best ornament is giving charity, true speech is the ornament of the neck, for ears best adornment is listening to good words. Materialistic jewelry of stone and metals is of what use.

अयं निज परो वेति गणना लघु चेतसानाम् उदारचरितम तु वसुधैव कुटुंबकम।

This is mine and that is yours, this classification is done by petty people. For the magnanimous, the whole world is one big family

MRS. SHALINI VASHISHTHA
ASSISTANT PROFESSOR

Sports Achievement By Faculty

Atria Institute Faculty Volleyball Team took part in B.S. Narayan Memorial Inter Collegiate Tournament for Staff, in which more than 20 teams took part and secured 2nd Place. The Tournament was organized by B.M.S. College of Engineering on 19th & 20th February 2021. It was a good learning experience for the entire team.

STUDENTS
CORNER

Yunhi... Fida nahi hu tujh par,
Tere shakal se zyada sundar...
mujhe tera Mann pasand hai,
Teri adaa pasand hai,
Teri akad pasand hai,
Tu Pasand hai,
Teri har ek baat pasand hai

Yunhi... Deewana nahi hu tujh par,
Tere hontho se zyada mohak...
mujhe teri Vani pasand hai,
Teri chaal pasand hai,
Teri payal ki jhankar pasand hai,
Tu pasand hal,
Teri har ek baat pasand hai

Yunhi ..marta nahi hu tujh par,
Teri ankho se zyada komal...
mujhe teri nazar pasand hak,
Teri mahak pasand hai,
Teri muskan pasand hai,
Tu Pasand hai,
Teri har ek baat pasand hai

Yunhi .. pagal nahi hu tujh par,
Tere khayalo se zyada...
mujhe tera sath pasand hai,
Teri chamak hai,
Teri thumke ki lachak pasand hai,
Tu Pasand hai,
Teri har ek baat pasand hai

UDIT MALIK|7TH SEM
UDIT MALIK|3rd YEAR

TRUST: A gamble game

The word trust itself has so much power in it,even though it's a mere word of five letters,these five letters play an important role in one's life.
Trust is the factor which decides our happiness, personality and well being.But at present trust is just a word,because people are being betrayed on the pretext of trust in every relationship that a human has with others.
With betrayal, bit by bit a person loses the belief on the word trust.
Trust is something which is acquired by actions,deeds or words.Size of the above qualities does not matter,what matters is the intention.Once a trust is built,its like cherry on the cake ,it makes a person complete by trusting oneself or from the opinions or advices or an action from the person or the thing being trusted.
Trust when used correctly is a heaven for one,as it helps one be a better version of themselves in all aspects,as the title says gamble game,the tables also tend to turn ,when trust is misused it becomes a hell,an uncountable flow of emotions one goes through ,the feeling of sudden loss,that loss is equivalent to losing something very precious.It changes the behavioural pattern of a person,it could be good or bad.
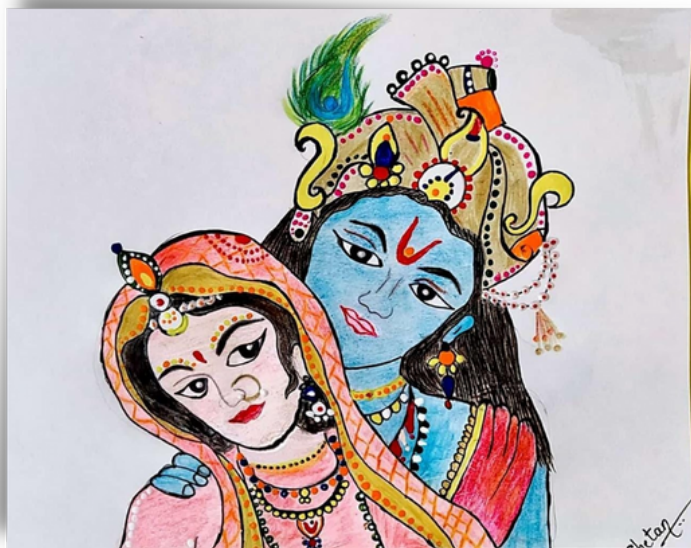There is a saying "To be trusted is a greater compliment than being loved"
So I as a person feel that trust should be invested wisely,to get more profit which could benefit everyone and help us to become a better person as well.

Srusti patil
3rd YEAR

VAISHNAVI RK|1st YEAR

CHETAN K A |3rd YEAR

UDIT MALIK|4th YEAR

ART WORK

ASHWINI|3rd YEAR
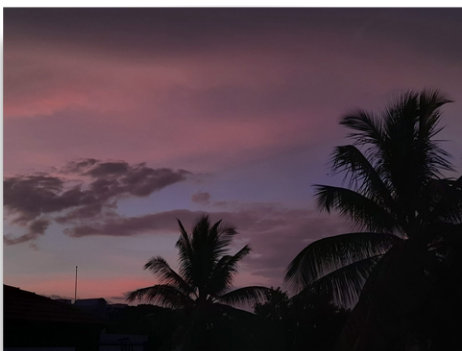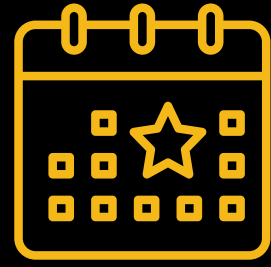

DEBLINA|3rd YEAR

SWETHA S|2nd YEAR

Chandu MP|3rd year

Bharghavi S|3rd year

EVENTS

23RD MARCH 2021

The IEEE Membership Drive by Dr. Ambar Bajpai and Dr. Arun Balodi, along with Execom members Pramod BN and Meghana R, on, 23rd March 2021
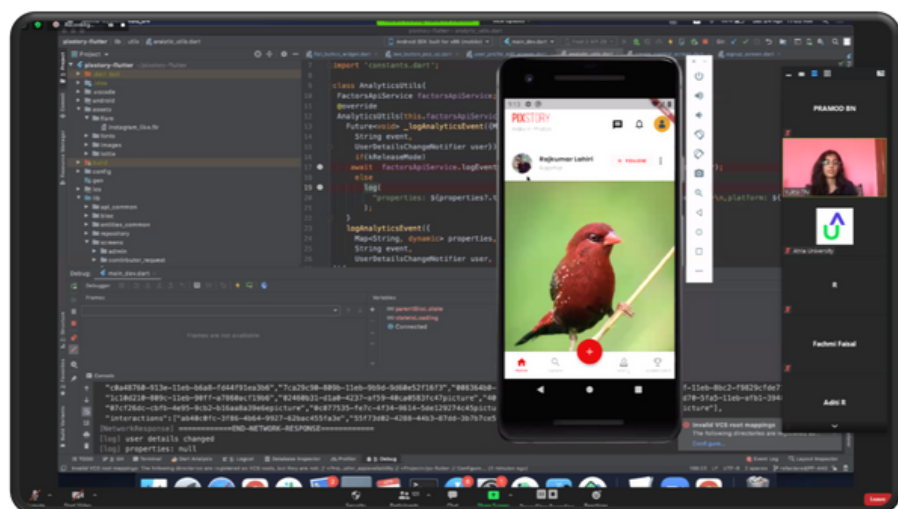
24TH APRIL 2021

International workshop on getting started with Flutter was presented by Yukta T.N.

19TH MAY 2021

International workshop on Introduction to GitHub was presented by Sanchith B Anand

09TH JUNE 2021

International workshop on getting started with React JS was presented by Raj Sharma
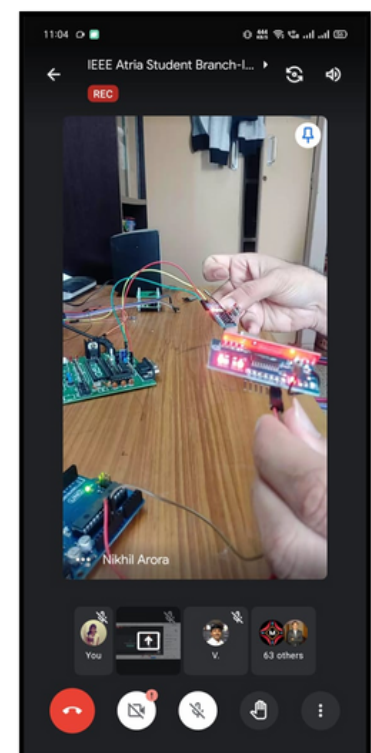
19TH JUNE 2021

The Career Goal programme was organised by Dr. Arun Balodi, Advisor of IEEE AIT STB, Head. Dept. of ECE, AIT

26TH JUNE 2021

International Project Expo Junior Einstein event was organized by IEEE Atria Student Branch

14TH JULY 2021

RAILWAY MONITORING SYSTEM USING WIRELESS SENSOR NETWORK WEBINAR, Organized by IEEE Student Branch
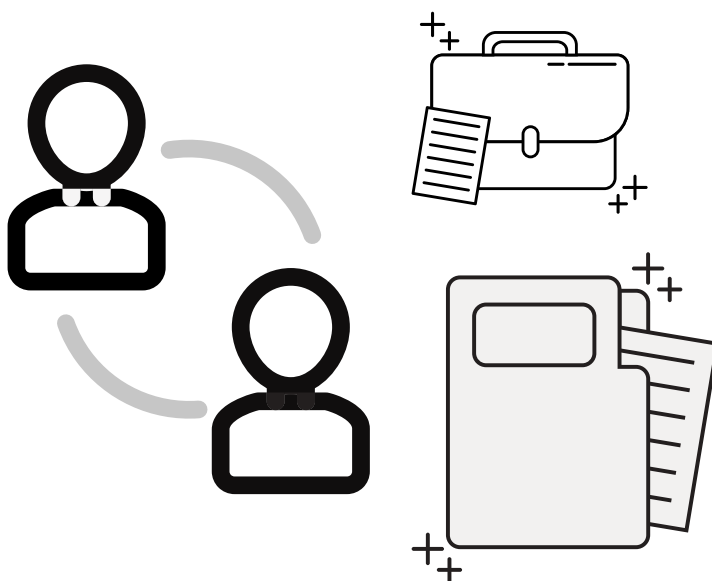
DEPARTMENT
ACTIVITIES

INHOUSE FDP'S SUMMARY SHEET

S.NO	Title	Activity date	Duration	Participants
1	"5G, IoT, and Artificial Intelligence: Research Trends and Applications"	27th-1st Oct 2021	5 Days	657
2	Current Research Trends in VLSI design and Device Modelling	24th-28th Aug 2021	5 Days	75
3	"Advancement in Signal and Image Processing"	8th-12th Feb 2021	5 Days	85

List of SDP's/STTP's

SL NO	TITLE	DATE	Participants
	2021-22		
1	**Sensor Interfacing with Photon Devices for IOT: Tinkering Lab**	**12/11/2021**	**120**
2	**Tinkering lab using photon device for IOT**	**11/11/2021**	**120**
3	**How to create Alexa skill sets and its customization**	**10/11/2021**	**120**
4	**Use of IFTTT for making of Applications smart**	**9/11/2021**	**120**
5	**An Effective literature Review: What, Where and How**	**28/10/2021**	**50**
6	**Python Using Pandas**	**17/9/2021**	**45+**
7	**Webinar on Outcome Based Education**	**3/7/2021**	**50+**
8	**Introduction to MATLAB & SCILAB**	**3/6/2021**	**65**

PLACEMENTS and HIGHER STUDIES

NTT DaTa

S.MAHESH
GAGAN R
CHAITRA S

CHINMAYE REDDY D.O
MANISH KUMAR
RACHANA GANIGA

HARSHITH KUMAR DUBE
NIDHI SAMPATH
PRAGNA SHREE D
PRIYANKA .D.M
PURUSHOTHAMA R
PUSPANJALI SUMAN
VAISHANAVI KRUPANAND

accenture

Capgemini

SHUBHANSHU DUBEY
DHANUSHITHA H.S
MANU S
MEGHANA.D.A

NISHANTH C R
RANJANI S
SWARNA V
SYED SHAHBAZ ALI

ARFA REHMAN
LIKITHA V
LATHASHREE M.S
MEGHANA R
TEJASWINI G
TEJASWINI M GOWDA

cognizant

DELL

AMEENA FIRDOSE
NISHITHA PALAN

CHETAN R H
FAREEHA AJAZ
POOJA VILEKHA
BURUJU
RAJESH AC

DXC TECHNOLOGY

Infosys

ARSHEYA N
ARYA L GOWDA
BHAVANA C S
PREETHAM H M
PREETHI MARY FERNAN

M.V.RAKSHITHA   VISHWAS V
MANIKANTA R   YASHODHAR C BELGAUM
SHILPA L   LIKITH V
UMA .N.M   PRAVEEN JOSHI
VIGNESH.B.R

INNOLABZ

SONATA SOFTWARE

AHAD MUSTAQ A W K
MOHAMED TOUSIF
PREETHI J
PREETHI N

ANNASAB SHEETAL PATI
CHANDANA C
NIKHILESH JOSHI
RACHANA R
ROOHI KHANAM
BHUVANA N

tcs | TATA CONSULTANCY SERVICES

wipro

JESTINE P A
AMAR KAMBLE
CHRISTIENA
KRISHNARAJENDRASAG
SUJAY G HEBBALLI

SWATHI S
DIVYASHREE S

GLOBAL QUEST TECHNOLOGIES

Department of ECE

VISION

To become a pioneer in developing competent professionals with societal and ethical values through transformational learning and interdisciplinary research in the field of Electronics and Communication Engineering.

MISSION

The department of Electronics and Communication is committed to:

M1: Offer quality¬ technical education through experiential learning to produce competent engineering professionals.

M2: Encourage a culture of innovation and multidisciplinary research in collaboration with industries/universities.

M3: Develop interpersonal, intrapersonal, entrepreneurial, and communication skills among students to enhance their employability.

M4: Create a congenial environment for the faculty and students to achieve their desired goals and to serve society by upholding ethical values.

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

Upon completion of the program, graduates will be able to:

PEO1: Tackle complex engineering problems with the sound knowledge of electronics and communication engineering.

PEO2: Utilize their knowledge and skills to develop solutions in multi-disciplinary environments through collaborative research.

PEO 3: Inculcate effective communication skills, teamwork, and leadership for a successful career in industry and academia.

PEO4: Exhibit professional ethics and social awareness in their professional career and engage in lifelong learning.

PROGRAM SPECIFIC OUTCOMES (PSO's)

Engineering Graduates will be able to:

PSO1
Apply the knowledge of leading-edge hardware and software tools to solve problems in the area of Embedded Systems, VLSI, and IoT.

PSO2
Apply the concepts of Signal and Image Processing to solve problems in communication systems.

STUDY LINKS

- NPTEL - www.nptel.ac.in
- COURSERA - www.coursera.org/in
- UDEMY - www.udemy.com
- LINKDEN - www.linkedin.com
- edX - www.edx.org
- NAUKRI - www.naukri.com
- KHAN ACADEMY - www.khanacademy.org
- INTERSHALA - www.internshala.com

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BHARGHAVI

DARSHAN

ALIYA

DISCLAIMER

This magazine is designed solely for informational purposes and an insight into the department. While we take a lot of care to ensure getting the right information, news, content however the magazine team assumes no responsibility or liability for any errors or omissions in the content of the magazine.

In the year 2019, the Electronics and Communication Department Magazine, Sem Digest, was digitized for the first time.

All the student and faculty, technical and non-technical articles, blogs, published papers, artwork photography were restructured and designed to fit the digital version.

Our student and faculty editorial team carefully curated every part of this magazine under the digital copy

ATRIA
INSTITUTE OF TECHNOLOGY

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f Atria IT Dept. of ECE