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Bapuji Institute of Engineering and Technology
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EC VOICE

A QUARTERLY NEWSLETTER OF
ELECTRONICS & COMMUNICATION ENGG.

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Vision: To be in the forefront in providing quality technical education and research in Electronics & Communication Engineering to produce skilled professionals to cater to the challenges of the society.

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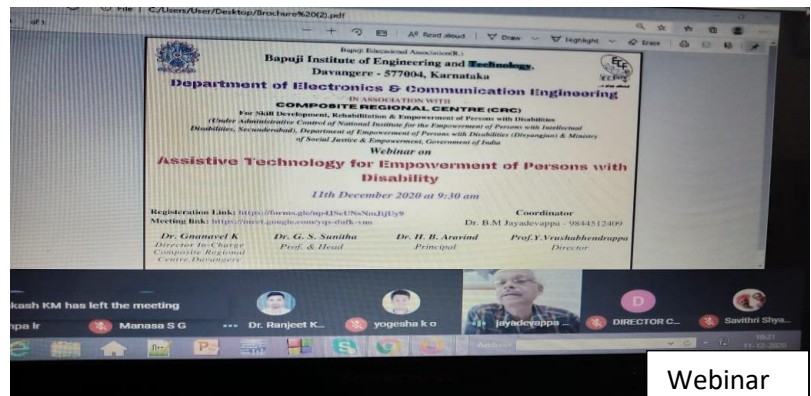
Sri. V S Patil

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Sri. Ramesh G



Department Ayudha Pooja



Webinar

Inside the Issue

- Departmental Activities
- Student Achievements / Activities
- Faculty Achievements / Activities
- Articles
- Literary Contribution
- Alumni Corner

Quote Corner

Many of life's failures are people who did not realize how close they were to success when they gave up.

-Thomas Edison

Chairman/Editor
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Mission:

- M1. To facilitate the students with profound technical knowledge through effective teaching learning process for a successful career.
- M2. To impart quality education to strengthen students to meet the industry standards and face confidently the challenges in the program.
- M3. To develop the essence of innovation and research among students and faculty by providing infrastructure and a conducive environment.
- M4. To inculcate the student community with ethical values, communication skills, leadership qualities, entrepreneurial skills and lifelong learning to meet the societal needs.

National Education Policy 2020

The **National Education Policy 2020 (NEP 2020)**, which was approved by the Union Cabinet of India on 29 July 2020, outlines the vision of India's new education system. The new policy replaces the previous National Policy on Education, 1986. The policy is a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India. The policy aims to transform India's education system by 2040.

The vision of the National Education Policy is:

National Education Policy 2020 envisions an India-centric education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society by providing high-quality education to all.

Provisions:

The NEP 2020 enacts numerous changes in India's education policy. It aims to increase state expenditure on education from around 3% to 6% of the GDP as soon as possible.

The changes and objectives are related to:

- Languages
- School education
- Higher education
- Teacher education

From HOD's Desk

It is need of the hour to Transform India's Education system by implementing NEP 2020. Due to the pandemic covid-19, education system has



transformed into digital world. Our faculty members are motivated to align the students for this change.

I am happy to share that MOU has been signed with ALTILogic Technologies, Bangalore, for the development of skills in the students.

I congratulate all the faculty and students for achieving A+ grade in the Academic Audit 2019-20 and heartfelt thanks to the Audit experts Dr. C M Patil, Prof. & Head, Dept. of E&CE, VVCE, Mysore and Prof. Ashalatha M E, Head, Dept. of E&I, BIET , Davangere. Also congratulations to the faculty and students for updating their knowledge by attending training programs and the students for obtaining NPTEL certification.

It is my pleasure to place on record that 34 students have been placed on campus. Gnana Vrudhi- lecture series has been initiated in the department to gain knowledge in various domains.

PSOs of E&CE Program

At the end of the program, students are expected to have developed the following program specific outcomes

PSO1: Specify, design, build and test analog, digital and embedded systems.

PSO2: Understand and architect wired and wireless analog and digital communication systems as per specifications and determine their performance.

DEPARTMENTAL ACTIVITIES

Webinars

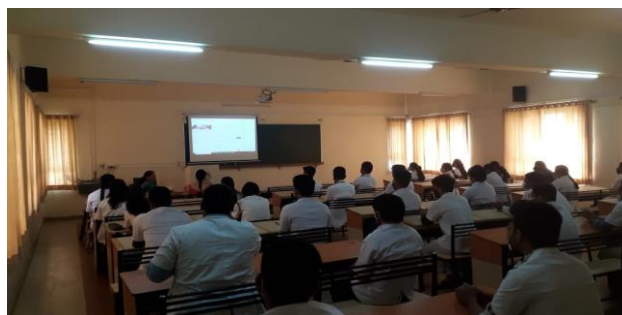
- A Webinar on **Remote Lab Platform for Hardware Circuit Experiments** was organized on 10th Nov 2020 from 9.30am to 12.30 pm in association with IEI Local Centre, Davangere. The event was coordinated by **Dr. G.S. Sunitha**, Program Coordinator. The resource persons were Dr. K C Narasimhamurthy, Professor & Head, Dept. of ETE and Team of Remote Lab, SIT Tumkur.



- Webinar on **Assistive Technology for Empowerment of Persons with Disability** was organized on 11th December 2020 in association with Composite Regional Centre (CRC) Davangere. The event was coordinated by **Dr. Jayadevappa B.M.**, Professor. The resource persons were **Dr. Gnanavel K.** Director In-Charge Composite Regional Centre, Davangere and his team.



- Webinar on **Cloud Based Application Software Development** was organized on 28th December 2020. The event was coordinated by Prof. Bhagya Shanthakumar . The resource person was Mr. Basavaraj Patil Solution Architect , Fidelity Information Services Global Inc., USA, alumni of 1992 Batch.



Orientation Program

- **Orientation Program** for III semester Students was held in virtual mode on 17th & 18th December 2020. Students along with their parents actively participated. Dr.G.S. Sunitha, Program Coordinator, delivered a presentation regarding Department and University curriculum and norms.

Other Activities

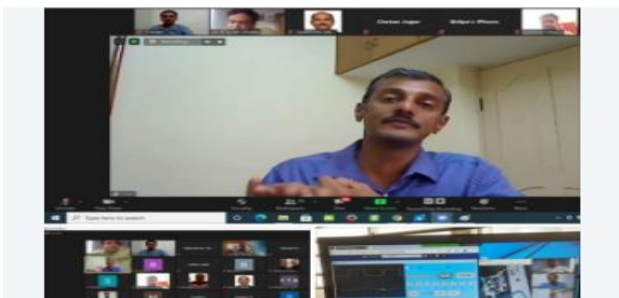
- Dr. G S Sunitha, Dr.G H Leela, Dr.Avinash K G, Prof. Shwetha S and Dr. Shankarmurthy A G, Nodal Officer, VLABS, BIET visited the Remote Lab setup at ETE Department, SIT , Tumkur on 14th Oct 2020.
- Department of E&CE has signed an MOU with Altilogic Technologies, Bengaluru for 1-year duration from 20th Oct 2020 to 19th Oct 2021.
- Academic audit for the academic year 2019-20 was conducted by External member Dr. C M Patil, Prof. & Head, Dept. of ECE, VVCE, Mysore and Internal member Prof. Ashalatha M E, Head, Dept. of E&I, BIET on 28th Oct 2020 and department received A+ grade.



Academic Audit

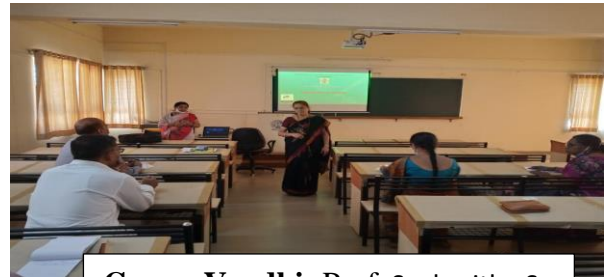


- Inauguration of skill development course for SNQ students using PRAYOGeek UNO by ALTILOGIC Technologies on 29th Oct 2020 hosted by Dr. G S Sunitha and Prof. Ganesh K.



- Prof. Prakash K M and V S Patil carried out 3rd party inspection of CCTV installation at UBDTCE, Davangere on 6th Nov 2020.

- Dr. G S Sunitha was invited as REVIEWER at IEEE conference MPCIT 2020, JNNCE, Shimoga on 11th to 12th Dec 2020.
- Dr. Jayadevappa B M gave a presentation on Design of Power Supply required for final year students Project work on 19th & 20th Dec 2020.
- Gnana Vrudhi- Lecture series was initiated in the Department for the faculty to acquire knowledge in different areas. Under this faculty will deliver a lecture every fortnight. The first lecture **Introduction to Python** was by Prof. Sucharitha S D on 26th Dec 2020.



Gnana Vrudhi- Prof. Sucharitha S



- Faculty attended the Lecture Series organized by the research and Development Cell, BIET as per the schedule-

Bapuji Educational Association © BAPUJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, DAVANGERE-577004 RESEARCH AND DEVELOPMENT CELL PRESENTS LECTURE SERIES-2020		
Schedule	Speaker	Title
19.11.2020 Day 1 Thursday	Dr. H.B. Aravinda	Status of Rivers in India.
	Dr. Pradeep N	Industry 4.0
20.11.2020 Day 2 Friday	Prof Y Vrushabhendrappa	Role of Faculty in guiding students' Project.
	Dr. G.P. Desai	Indian Astronomy-Basics and Concepts Part-1.
23.11.2020 Day 3 Monday	Dr. Poornima B	Technologies in Scalable Applications.
	Dr. K. Sadhashivappa	The Joy of Research.
24.11.2020 Day 3 Tuesday	Dr. K.S. Basavarajappa	Mathematics in Engineering.
	Dr. Ashalatha M.E	Medical Imaging Techniques.
	Dr. M.S.Nagaraj	Uninterrupted Power Supply.
25.11.2020 Day 4 Wednesday	Dr. B.E. Rangaswamy	Building Atmanirbhar Bharath-Role of Science and Technology.
	Dr. Sunitha G.S	V2x Technology.
26.11.2020 Day 5 Thursday	Dr. K.B. Ravindra	Antimicrobial Textiles.
	Dr. B.E. Basavarajappa	Chemistry of Corona virus.
	Dr. S. Kumarappa	Electronic Gas Injection System.

Venue : Placement Seminar Hall
Date: 19th to 26th November, 2020 | Time: 3:30pm to 5:00pm
ALL ARE CORDIALLY INVITED
Dr. B.E. Rangaswamy Dr. H.B. Aravind Prof. Y. Vrushabhendrappa
Dean-Research & Development Principal Director
Note : Duration of the lectures 30-35 minutes each.

STUDENT ACHIEVEMENTS AND ACTIVITIES

Campus Placement

Students placed in Campus Recruitment till the end of Dec 2020 :

Sl.No.	Name of the company	No. of students Placed
1	TCS	08
2	iNube Software Solutions Pvt. Ltd	01
3	SLK Technologies	08
4	Technologics Global Pvt. Ltd.	01
Total		18

Co-Curricular Activities

- Department organized a **Technical Webinar on Cloud Based Application Software Development** under EC forum on 28th December 2020 for students of VII sem.
- Sushmitha A O of V Sem and Meetha M Belludi of III Sem successfully completed online Quiz on **Engineering Statistics and Linear Algebra** Organized by Department of Electronics and Communication, S T J Institute of Technology, Ranebennur on 7th Oct 2020.
- Saniya Kouser S student of V sem participated in a workshop on **Learn Advanced HTML5** organized by S T J Institute of Technology, Ranebennur on 7th Dec 2020.
- Jahnvi R of VII Sem attended Online C-Quest Coding Competition Organized by CSE Dept., BIET, Davangere on 14th Dec 2020.

NPTEL Online Certification

The listed students completed NPTEL online certification courses:

Sl.No.	USN	NAME	NPTEL COURSE
1	4BD18EC079	Raghavendra V	Digital Circuits
2	4BD18EC079	Raghavendra V	Control Systems
3	4BD18EC089	Shashank T S	Digital Circuits
4	4BD18EC111	Sushmitha A O	Digital Circuits

FACULTY ACHIEVEMENTS AND ACTIVITIES

Publications

- Prof. Banumathi K. L published a paper titled **Document Image Skew Detection and Correction based on 3 Quadrants Gradient Detection Scheme** in Journal of VLSI and Signal Processing, Volume 10, Issue 5, Ser. I, Sep.-Oct. 2020.

Research Activities

- Prof. K M Prakash completed Ph.D. Open Seminar 2 before the Doctoral committee and Research Supervisor Dr. G S Sunitha on 13th Nov 2020 for the research titled **Polar Codes for Low Complexity Encoding & Decoding and their Performance Analysis**.
- **Dr. B M Jayadevappa** submitted a Proposal titled **Electronic Assistive Devices** to AICTE-ISTE ORIENTATION/ REFRESHER PROGRAM (AICTE quality Improvement Scheme-2021-2022)
- All Faculty members have obtained membership of IAENG (International Association of Engineers)

Workshops/FDP Attended

- Prof. Savithri G R participated in webinar on **VLSI (ASIC- Concept to chip Tapeout) & Electronic Systems design series** organized by department of Electronics & Communication, VTU, Belgavi from 4th Sept to 9th Oct, 2020.
- All the Faculty attended an FDP for affiliated Engineering colleges of VTU Belgavi on **Virtual Labs Initiative** on 21st Oct 2020.
- Prof. Savithri G R attended webinar on **Art of Writing Research Paper** organized by Guru Ghasidas Vishwavidyalaya, Bilaspur, India on 7th Nov 2020.

- Dr. Jayadevappa B M attended webinar **NEP 2020-Higher Education, Curriculum Issues and Implication** on 20th Nov 2020.
- Dr. Jayadevappa B M, Dr. Leela G H, Dr. Nirmala S O, Prof. Kiran Kumar G H, Prof. Radhika Priya Y R, Prof. Ali I K , Prof. Swetha S, Prof. Mahendrachari, Prof. Ranjith Patil N and Prof. Lingaraj attended AICTE Sponsored One Week Online Faculty Development Program on **Research Areas in Biomedical Signal Processing** from 14th to 19th December 2020 organized by Sri Vasavi Engineering College (Autonomous), Hyderabad.
- Dr. Avinash K G attended AICTE Training and Learning (ATAL) Academy Online FDP on **Smart Cities** from 7th to 11th Dec 2020 organized by Lendi institute of Engineering and Technology, Vizianagaram, Andhra Pradesh.
- Prof. K M Prakash, Prof. Nirmala G, Prof. Shwetha S and Prof. Yogesh K O attended a **Webinar on DevOps Insights** on 12th December 2020 organized by Department of Information Science and Engineering, EPCET, Bengaluru.
- Dr. Avinash K G attended One Week Online FDP on **RF Technology for Energy Harvesting, Medical and Commercial Applications (RFTEMC 2000)** held from 14th to 18th Dec 2020 organized by Sreyas Institute of Technology, Hyderabad.
- Prof. Ranjith Patil N attended AICTE sponsored One Week Online Short Term Training Program on **Research Trends in Computer Science and Engineering** from 14th to 19th December 2020 organized by Department of Computer Science and Engineering, SDMCE&T Dharwad.
- Prof. K M Prakash attended a Webinar **National Mathematics Day-2020** on 21st and 22nd December 2020 organized by BIT, Bangalore.
- Prof. Ranjith Patil N attended **Use Of Mobile Applications For Digital Payment And E-Governance Services** from 21st to 28th December 2020 organized by SVCE, Bengaluru.
- Dr. G H Leela, Dr. Nirmala S O, Prof. K M Prakash, Prof. Suma K G, Prof. Savithri G R, Prof. Bhagya S, Prof. Ali I K, Prof. Nirmala G, Prof. Swetha S, Prof. Ranjith Patil, Prof. Lingaraj, Prof. Poornima G N, Prof. Suman B S, Prof. Yogesh K O, Prof. Vanishree H V and Prof. Kanthraj S P attended a Webinar on **Problem solving and ideation** held on 28th December 2020 organized by Vivekananda Institute of Technology, Bengaluru.

Invited Lectures Delivered

- Prof. Ganesh K Delivered a talk on **Technical Education for Higher Secondary Level for Rural Development and STEM Education for Rural Development Through Technical Education** in AICTE sponsored Online Short Term Training Program(STTP) " on 7th and 10th Dec, organized by Govt. Engineering College, Hassan
- Prof. Ganesh K Delivered an invited talk **Karnataka's Rich Heritage and Engineers Role in Promoting and Preserving** for Virtual Student Induction Program on 14th Dec 2020, organized by Don Bosco Institute of Technology, Bengaluru.

ARTICLES

Social Media – A Boon and a Bane

When the internet was created, perhaps no one was aware of its potential. It was just a convenience for sharing of information across some computers. Starting from ARPANET in 1960, passing through TCP/IP technology, today there is a social media system which brings us so close that as if time and distance stand reduced almost to zero. All of us who are on social media are from different parts of the globe, perhaps from places which we may not see during our lifetime, yet we are Facebooked, Twittered, Linkined, WhatsApped, and so on.

Social media has brought the world so close that political and geographical boundaries are crumbling. Time may come when netizenship may surpass citizenship. The more people-to-people communication is, the more is the strengthening of relationships.

A serious problem is that the spread of misinformation can severely impact the decision-making process. This is because we are closer in the virtual world but far away in the physical world. Digital culture has become so widespread that whatever appears on the Net, is readily accepted. Cross-check is almost nil. It is a dangerous trend. The children today believe more in the popular search engine than anything else. That is why fake news goes viral almost instantly through social media forwards. It has a cascading effect. Not only the problem is of magnitude but also in not being able to find its source also.

Social media is an important tool put into the hands of an ordinary person. He or she can express views without going to conventional means of mass communication like TV, radio, etc. Of all the creatures, only human beings have the faculty of expressing themselves through language, written or spoken. It is for this purpose; freedom of speech is the most basic rights protected in all democratic setup. But at the same time, it should not eat away other rights through the spread of misinformation. A coordinated regulation is necessary so that it is put to good use, not the bad.

LITERARY CONTRIBUTIONS

ಧರಗಿಳಿದಳು ವರ್ಷಧಾರೆ
ಸಮಯವಲ್ಲದ ಸಮಯದಲ್ಲಿ!!!
ಸಮಯಕ್ಕೆ ಸರಿಯಾಗಿ
ಮರೆಯಾಗುವೆ!!!
ಭುವಿಯ ತಣಿಸಿ ,
ಹಸಿರ ಸಿರಿಯನು ಬೆಳಗಿಸೋ
ನಿನ್ನ ಮುನಿಸಿನ ಧಾರೆಯಿದು..!!
ಮನುಜನ ವರ್ತನೆಗೆ ,
ಮನುಕುಲದ ಮಲಿನತೆಗೆ
ಪ್ರಕೃತಿಯ ಉತ್ತರವಿದು!!!
ಬದಲಿಸಿಕೋ,
ನಿನ್ನ ಭಾವವ ...ಬದಲಿಸಿಕೋ
ನಿನ್ನ ಮನವ....
ಭೀಕರ ಭವಿಷ್ಯ ಕಾಣುವ
ಮೊದಲು,
ಪ್ರಕೃತಿಯ ಉಳಿಸಿಕೋ.....!!!

ಶ್ರೀಮತಿ ಸುಚರಿತ S D
Asst. Professor

ಬೀಳ್ಕೊಡಿಗೆ...

ಹೊಸ ಸೀರೆ, ಹೊಸ ಕೋಟು,
೪ ಹೊಸವರ್ಷಗಳ ಪ್ರಯಾಣಕ್ಕೆ ಅಂತ್ಯ ಹಾಡುವ
ಸಮಯ ಬಂದಿತ್ತು....
ಜೀವನಕ್ಕೆ ಹುಮ್ಮಸ್ಸು ನೀಡುವ ಭಾಷಣ,
ಗೆಲೆಯರೊಂದಿಗೆ ಕೊನೆಯ ಟಿಪ್ಪಣಿಗಳಿ ಸ್ವೆಪ್ಸ್,
ನಾವು ಮಾಡಿದ ಹುಡುಗಾಟ, ಕೋತಿ ಚೇಷ್ಟೆ,
ಸಿಹಿನಿನಪಿನ ಚಿಕ್ಕ ವೀಡಿಯೋ...
ಜೊತೆಗೆ ನೇರ ಹೈದಯಕ್ಕೆ ನಾಟುವ "ಜಾಲಿಡೇಸ್"
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ಒಂದು ಕಡೆಯ #batch2020 ಫೋಟೋ,
ಕಣ್ಣಲಿ ನೀರು,
ಮೊಗದಲಿ ನಗು,
ಪ್ರತಿಧ್ವನಿಸುವ ಕೂಗು,
ಮನ ತುಂಬಿ ಹರಿಯುವ ನೆನಪುಗಳು....

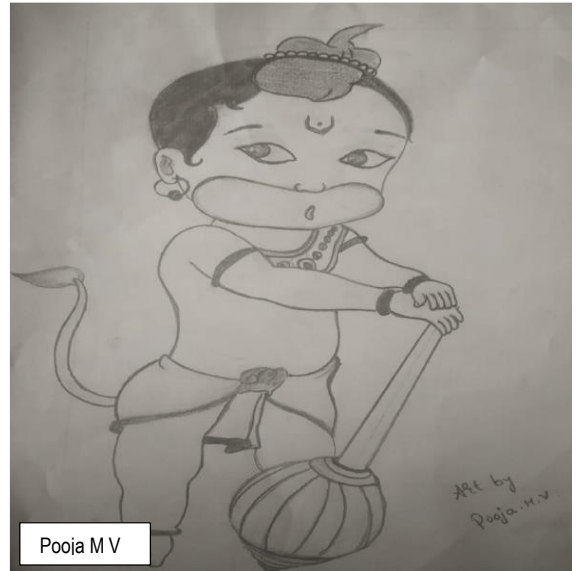
ಖಂಡಿತ ಈ ಅಮೂಲ್ಯ ಕ್ಷಣಗಳನ್ನು
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#batch2020

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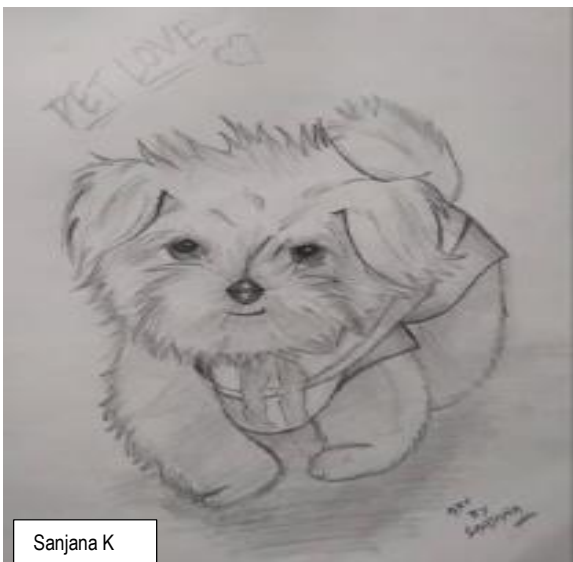
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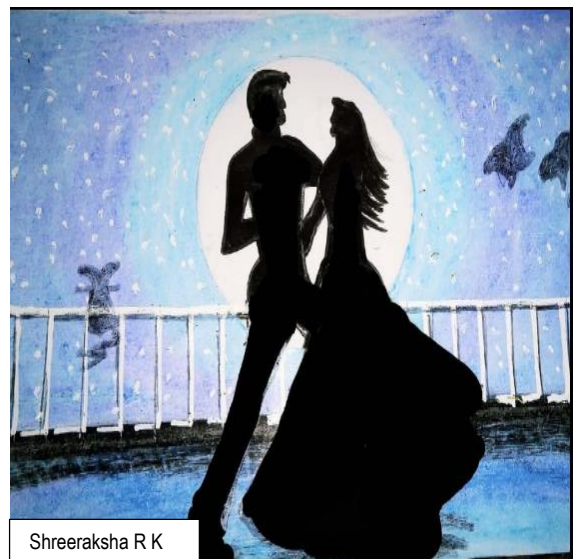
Sanjana K



Pooja M V



Sanjana K



Shreeraksha R K



Shreekanth Sampigethaya

Technical Specialization

- Foundation IP Design
- Embedded System Design
- SoC/ASIC Design and Implementation

Education, License & Certifications

- M. S in Electrical Engineering, Oklahoma State University
- B.E (Hons). Electronics & Communication Engineering, BIET, Davangere, University of Mysore, India.

Background

- A dynamic professional with over 20 years of valuable experience in Project Leadership and Product Life –Cycle Management and Engineering Change Management.
- Deft in building and managing complete Engineering Operation involving design & development in compliance to global quality standards; expertise in ascertaining specialization for new designs and modifying existing designs.
- Shreekanth has 20 years of experience in the semiconductor domain in fields of CPU cache design, IP design and Design automation development. Has been instrumental in delivery and management of processor and memory products in companies like AMD and TSMC, also involved in many Embedded memory products technical specializations, Architecture and delivery at Virage Logic. He holds 6 US patents in memory circuit design.

Professional and Industry Experience

Insemi Technology Service, India: Feb 2018-Present, Co-Founder & President

- Built an engineering organization of 350+ people growing.
- Responsibilities including setting up processes for operational efficiency in all domains of an organization.
- Grow business through acquiring major clients like Qualcomm, AMD, GE, Samsung, and Synopsys.

AMD India Pvt. Ltd., Bengaluru; Mar 2013-Jan 2018, Sr. Manager

- Built and managed a 30 people Core Circuit team to eventually managing IDC- Cores Physical Design Team (60).
- Delivered as part of the physical design team for products like XBOX, PS4 and Ryzen cores.

Interra System Pvt. Ltd., Bengaluru: Dec 2010-Mar 2013, Engineering Director

- Built and managed a 60 people memory circuit and layout team for companies like ARM, LSI.

TSMC N. A., San Jose CA: Oct 2008 – Nov 2010, Technical Manager

- Responsible for cache development of ATOM processors ported on to TAMC Process.

Virage Logic, Fremont CA: 1996 – Oct 2008, Senior Design Manager

- Grew from a technical manager to senior design manager. Delivering multiple embedded memory products from 500nm to 40nm.