Vol. 4

Issue 02- April to June, 2021

Dr.M.G.R. Educational and Research Institute (DEEMED TO BE UNIVERSITY) (An ISO Certified Institution) University with Graded Autonomy Status Maduravoyal, Chennai - 600 095



FACULTY OF ENGINEERING AND TECHNOLOGY DEPARTMENT OF MECHANICAL ENGINEERING

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MESSAGE



by, Dr.M.Ganesan HOD / Mech

The department of Mechanical Engineering is publishing the News Letter with a frequency Half yearly from 2017. The activities of the department related to student achievements, staff research details, awards and other relevant details pertaining to the department in the last 6 months will be available in the News letter at a glance. I am very happy and delighted that the department is releasing the News letter for the period April 2021-to June 2021.

I wish this edition of News letter will be very informative to all students and faculty members of the department.

MESSAGE



by, Dr.Ethiraj, Deputy HOD/Mech.

Welcome to the April 2021- June 2021 edition of Mechanical department newsletter. The pandemic has created a different life style among us. The impact of pandemic on educational system is alarming and imposed a need to explore a method to overcome this situation. Eventhough the digital learning is gaining popularity, there is a concern among the academicians regarding the conduct of practical classes. Hybrid learning, both online and classroom teaching and learning, is possible in theoretical subjects. But, some of the theory subjects such as problematic subjects and design-oriented subjects definitely need the guidance of teachers in applying the fundamental knowledge of the subjects. Also, without having the hands-on training during practical classes, the understanding of the concepts and principles is very difficult for the students and may not be possible to apply their knowledge in industry. So, a big challenge lie in front of the academicians is to develop a learning platform using the latest technologies such as augmented reality, virtual reality, animation etc. I hope that the teaching fraternity will successfully overcome these situations like the way by which we fought against the pandemic.

MESSAGE

Dear Readers,

We are pleased to release newsletter MeXpress of our Department for the period, April 2021– June 2021. We thank our beloved chairman and president for their constant encouragement in all endeavors of the department.

Besides, inspirational and informative articles, the news letter has riddles to kindle the forgotten art of reading for many. In the era of digital world and social media, reading out from print media should be refreshing and strengthen an individual's mental muscle. Success stories from past and present always brings out the best flashbacks and bound to inspire many others in aspiring for greater heights. Department is elated and thrilled to have them onboard and wishes them to conquer the unconquered territories.

Your suggestions and criticisms are most welcome for embellishing this newsletter.

"Happiness is a Habit"

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ACTION CORNER

Technical Events Organized for Students

SI. No.	Торіс	Date	Resource Person
1	TRANSCENDING OPPORTUNITIES FOR ENGINEERING GRADUATES	25.06.2021	Mr. Usama Tariq Rasheed Technical Sales Engineer and Business Developer Al Sharq Plastic Industries Co. Ltd Dammam, Saudi Arabia
2	TAKING CARE OF SELF DURING COVID	28.06.2021	Ms. Sandhya Shivakumar Clinical Psychologist Turiya Psychological Services, Chennai,



TAKING CARE OF SELF DURING COVID

TRANSCENDING OPPORTUNITIES FOR ENGINEERING GRADUATES

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ARTICLES CORNER AI ROBOTIC PERCEPTION SYSTEMS

by,

Dr.J.Jayaprakash., Professor/ Mech Engineering.

Artificial Intelligent (AI) Robotic Perception process consist of object detection, surrounding representation, scene understanding, pedestrian detection, activity recognition, semantic place classification, object modeling and so on. In that complex scenario of real time, perceiving action of system and surrounding, analysis of interpretation of 3D dynamic human-robot interaction, Machine Learning/Deep Learning is inevitable tool. AI tools converge the complex robotic tasks, intelligent reasoning, and decision-making problems into reasonable time with best solution. AI is the only solution for any future real-time engineering problems, like robotic perception.

In robotics, perception is understood as a system that endows the robot with the ability to perceive, comprehend, and reason about the surrounding environment. The key components of a perception system are shown in Figure 1. It consist of essentially sensory data processing, data representation (environment modeling) with Machine learning based algorithms.





Fig 1: Al Robotic Perception Systems

Robotic perception is crucial for a robot to make decisions, plan, and operate in real-world environments, by means of numerous functionalities and operations from occupancy grid mapping to object detection. Some examples of robotic perception subareas, including autonomous robot-vehicles, are obstacle detection, object recognition, semantic place classification, 3D environment representation, gesture and voice recognition, activity classification, terrain classification, road detection, vehicle detection, pedestrian detection, object tracking, human detection, and environment change detection.

In future we are not sure that robotic system may closely associate with us like a friend or takeover the power, but one thing is clear, turning mechanism of the robotic perception is in our hand. "Al is likely to be either the best or worst things to happen to humanity....."– Prof.Stephen Hawking..

ELECTRIC VEHICLE AND ITS RANGE

by, Dr.Rajan., Professor/ Mech Engineering.

Eelectric vehicle (EV) means a vehicle with an electric drive (motor) propulsion system that can be plugged in to recharge the batteries that provide at least some of the energy storage on the vehicle. There are two main types of EV: battery electric vehicles (BEV) that use only batteries for energy storage and must be plugged in to be recharged, and plug-in hybrid electric vehicles (PHEV) that have both batteries and liquid-fuel storage systems and that can either be plugged in or refuelled with liquid fuel to increase energy stored on the vehicle. Regular (non-plug-in) hybrids also have an electric drive system, but no plug. They rely on liquid fuel to recharge the batteries on board the vehicle, along with features such as regenerative braking. PHEVs typically are provided with a much smaller battery pack than BEVs, since they also have an internal combustion engine operating on liquid fuel. The vehicles may have a shorter driving range on batteries but usually have a longer overall driving range due to the liquid fuel - typically similar to conventional vehicles, achieving 750 or more kilometres of range overall. Current BEVs typically have less than 250 km (160 miles) of all-electric range today. However, some models, such as the Tesla Model S1 and BYD E6, have more than a 300 km range.

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SUCCESS STORY OF THE TECH BUFF-ELON **MUSK**

ΒY, RAVI RAJAN.N., 2 ND YEAR /ROBOTICS & AUTOMATION DEPT.

Introduction:

Elon Musk, a sensational name in the tech world, has stepped into multiple ventures and everything seems attainable by the business magnate. Musk was born on 28th June 1971 in South Africa, and at the age of 17, he immigrated to Canada. As a transfer student to the University of Pennsylvania, he finally landed in the United States. Musk is a well-known tech mogul who is widely recognized as the CEO of Tesla Inc., and as the Founder and CEO of Space X. Currently,

with a net worth of more than \$199.9 billion, Tesla's CEO is one of the wealthiest persons in the world.

Tesla Inc: The Electric Car Manufacturing Company. **SpaceX:** Musk's Aerospace Manufacturing Company. **Neuralink:** Research company trying to build devices that can be implanted into the human brain. **OpenAl:** Al researching not for profit company ensuring it doesn't destroy humanity.

The Boring Company: Focused to dig a network of tunnels in cities for high speed and no traffic driving.

The Early Life:

In 1988, Elon Musk graduated from Pretoria Boys High School. In 1989, he moved to Canada and joined Queen's University in Ontario to escape the compulsory military service of South Africa. After that, he attended the University of Pretoria for merely five months. Musk later pursued a Bachelor in Economics degree at the Wharton School of Business at the University of Pennsylvania. Further, he resigned after two days, to ful fil I his entrepreneurial aspirations when he was admitted to the Physics Graduate Program at the University of Stanford.

Success Story of The Tech Buff:

In 1995, Musk joined his brother Kimbal in inaugurating Zip2, an IT company that licenced newspaper software for online city guides. The Company didn't attract many in its first few years, but afterwards, the local and domestic newspapers finally started using Zip2 to sell the ir respective customers

additional services. In 1999, Zip2 was bought for a whopping \$340 million by Compaq's Alta Vista web search engine.

Musk then founded X.com, online financial services and email payment firm, with its business partners Peter Thiel and Max Levchin. X.com joined the American software corporation Confinity in 2000, which is best known for developing PayPal. Shortly before eBay bought PayPal at \$1.5 billion in 2001, Musk was named President and CEO of PayPal. Here, Musk eventually had the funds to put the Internet business behind to channel his attention to engineering business as an equity investor with nearly 180 million dollars in shares.

Struggling & Rising Years:

In 2004, Musk played an instrumental role in designing the first electric car of Tesla named "The Tesla Roadster". Under the leadership of such a big billionaire, Tesla emerged out to become the world's billionaire, Tesla emerged out to become the world's most popular and desirable car brands. Musk claims most popular and desirable car brands. Musk claims 2008 as the worst year of his life. With the financial crisis, Musk was broke, and he also had to pull out Tesla from the massive debt, and along with that, he was from the massive debt and along with that, he was undergoing a divorce procedure In January 2018, Tesla revealed that Musk would not collect an annual payment but that it would instead raise money depending on the rising market cap that it wanted to achieve in the next ten years.

With SpaceX, Elon Musk has signed several high profile contracts to develop rockets and perform military missions with NASA and the United States Air Force. Musk was outspoken about his hopes for a joint project with NASA to send an Astronaut to Mars by the year 2025. Elon Musk has always pushed all varieties of space age technologies, but it was not still a perfect ride for him. He went on from being bullied in school to becoming a small entrepreneur and finally became the leader of two innovative companies. But from there, he decided to rise and never settle down for anything less.

"When something is important enough, you do it even if the odds are not in your favour." Elon Musk

PUZZLE MAZE

BY, JERALD., 2 ND YEAR /MECH DEPT.

PUZZLE USED IN OLDEN DAYS

Maze is a path Or collection of path , typically from entrance to goal

MAZE

History behind the maze puzzle(nearly 4000 years ago the ancient Egyptians' were creating and designed labyrinths and mazes, using them as traps to protect their pharaohs from assassination; or tomb robbing bandits... maze puzzles are thought of as the world' oldest mechanical puzzles-dating back over 2500 years

Mazes have been built with walls and rooms, with <u>hedges</u>, <u>turf</u>, <u>com stalks</u>, <u>straw bales</u>, books, paving stones of contrasting colors or designs, and brick, or in fields of crops such as <u>com</u> or, indeed, <u>maize</u>. Maize mazes can be very large; they are usually only kept for one growing season, so they can be different every year, and are promoted as seasonal <u>tourist attractions</u>. Indoors, mirror mazes are another form of maze, in which many of the apparent pathways are imaginary routes seen through multiple reflections in mirrors. Another type of maze consists of a set of rooms linked by doors (so a passageway is just another room in this definition). Players enter at one spot, and exit at another, or the idea may be to reach a certain spot in the maze. Mazes can also be printed or drawn on <u>paper</u> to be followed by a <u>pencil</u> or fingertip. Mazes can be built with snow

Maze generation is the act of designing the layout of passages and walls within a maze. There are many different approaches to generating maze, with various maze generation algorithms for building them, either by hand or automatically by computer

Mazes have essentially five possible purposes: to escape, to get the prize, to trace a path, to be a metaphor, to be a stage. Escape: By far the most common purpose of a maze is to challenge the visitor to find the means of passing through and escaping. This is true of pencil and paper mazes and most hedge mazes.

PUZZLE SUPER CARS

BY, JOEL., 2 ND YEAR /AUTO DEPT.

SUPERCARS

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Evoluzione Subaru Brabus ONE Seventy seven AGERA Alfa Romeo testarossa MUSTANG VANQUISH huracan Mclaren

Shelby exige Tesla CCR keonigsegg CCX Ford GT GTR CARGER aston martin Lamborghini Chiron

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alpine Elise FOCUS RS SSC Ultimate Mium Enzo countach MERCEDES SLS huaym Noble LaFermri renault Survolt GUILIETTA Venom Veyron SS diablo lotus ZONDA pagani Porche Impreza Bullit Berlinetta HENNESS Jaguar gallardo ascari CARRERA aventador Bugatti VOL. 4

ACHIEVER'S CORNER

Dr.M.Ganesan HOD / Mech

(Principal Investigator / DRDO Project)

Dr.M.Ganesan, Prof and Head of the dept., an authentic leader with adaptive leadership traits is known for his consistent aspirations towards achieving overall excellence. Has a penchant for research based projects at different levels. The recent DRDO assignment with him at helm, as a Principle investigator is a proof for his inquisitive nature. He has visited countries like China and Britain for attending conferences and visiting premier universities for interactions . Has actively involved himself, in publications and patents and has been a firm motivating leader for many students over few decades.

Project details :

Feasibility Study for Design, Manufacture & Testing of indigenous CRDi Fuel Injection system of Diesel Engine for Armoured Fighting Vehicles (AFV)
Collaborating DRDO Lab :CVRDE, Chennai.
Grant-in-aid Project.
Principal Investigator (PI):
Dr. M. Ganesan, Professor & Head, Department of Mechanical Engineering.
Co-Principal Investigators (Co-PI's):
1.Dr. P.A.Lakshminarayanan, Adjunct Faculty, IIT Kanpur & Senior Consultant, ARI.
2.Mr. R. Venugopal, Scientist "G", Associate Director, CVRDE (Retd), Chennai & Senior Advisor, ARI.
3.Mr. D. Pandurengan, Scientist "F", VRDE (Retd), Director (Defence Projects), ARI.
Period of the Project:1 year
Amount of Allotment :Rs 35,68,175/-

Objective of the Project:

The main objective of the project is to carry out a feasibility study for the Design, Manufacture, testing & Development of the CRDi fuel injection system(fuel pump, Injector system and rail system) for 600 hp Engine for Armoured Fighting vehicles. The outcome of this study will be useful to design, manufacture, test, and develop the indigenous CRDi system for 600 HP engine and the other future Armoured Fighting vehicle Engine development projects.

LOGESWARAN (2017-2021)

Achievements

- Patented as the applicant in a patent named 'Thermal Management System using Nano porous membrane for batteries'.
- · Spark-up grant by ICREATE Ahmedabad for Thermal Management System for Electric Vehicle Batteries.
- 'Outstanding Participant' for the Talent Hunt event in IGEN-Nobel Laureate Series
- Incubated under the scheme of NewGen IEDC for the innovation 'Zero Wastage Water Purifier'.
- Awarded the 'Best Innovative Idea' by PALS (IIT Alumni).
- Runner-up (Team Lead) at Smart India Hackathon, Hardware Edition 2019
- · Second Prize at Robohacks conducted by Aligarh Muslim University, Uttar Pradesh.
- Runner-up at Hackware 2019 by Schneider Electrics on the topic 'Battery Cooling System' at Forge Factory, Coimbatore.
- · Winner of Innowah by PALS for Advanced Exhaling Filters for ventilators.
- Winner of NIC POC with a grant of 7,00,000/-

Participation

- · MSME finalist, Dr. MGR Educational and Research Institute.
- · Top 10 participants at Hackoholics, Coimbatore.
- · Certification course on Data Analysis with R.
- Certification program on Project Management conducted by PALS (IIT Alumni) with Real World Project Access.

Statistics				
Total Government Funds Received	INR 12,50,000/-			
No. of Awards	3			
No. of Projects handled and mentored	5			
No. of Hackathons Participated	8			
No. of roles in other organizing bodies	3			
No. of Nominations	3			

ALUMINI CORNER

MY JOURNEY THROUGH MGR AND BEYOND

ΒY,

MR. RITESH -2012 BATCH. ALUMINI/MECH DEPT.

I did B. Tech in Mechanical Engineering from Dr MGR College between 2008–2012. While I was in the final year of graduation, I secured All India Rank 166 in GATE 2012, which catapulted me to an admission in IIT Madras for doing M. Tech, and subsequently to BHEL as an Engineer Trainee. From February 2013 onwards, I am in BHEL, posted at Tiruchirappalli, presently in the capacity of Senior Welding Engineer.

I would like to share some of the memories that I still retain of the time I spent in Dr MGR College, Maduravoyal. Later in the article, I have offered a few bits of advice to students who are presently studying B Tech in MGR college. At the end, I have tried to share what life is like 10 years into a PSU job.

To begin, I would like to start from five years before i entered the college.

I am a native of Rajasthan, i studied in New Delhi between 9th to 12th grade (thanks to the posting in New Delhi of my army-man father), followed by an year of coaching preparing for IITJEE entrance. I had been a good student in school, so expectations from family and friends for doing well in JEE were sky-high. Unfortunately, I didn't do well.My performance wasnot just not good enoughfor IIT, but also not good enoughfor any NIT. The disappointment was gut wrenching, for me as well as parents (fatherdidn't speak to me for 1 ½ years).

In AIEEE, I got a rank of 47k. The online counselling algorithm of the AIEEE allotted me to Dr MGR College, as a result of which, on 16th July, 2008, sittingamidst total strangers, I found myselfin Bus No. 101 (which servicesthe Thiruvotriyur to Poonamallee route) in Chennai– wanting to begin collegelife.

Without knowing a word of Tamil, not having any friend/family or any acquaintance in Chennai, travelling all alone, surrounded on all sides by strangers, it would have been easy for me to get intimidated. But strangely, I found myself attracted to the earthiness of the Tamil people. Not for a moment did I feel that I was in a faraway alien land.

The people of Tamil Nadu have lot of respect and affection for the Tamil language, the vigorous way in which the respect for Tamil languageis sought to be generated, preserved, and continued – pulled my attention right from day one. I found it inspirational. Learningfrom this, I discovered a new found respect for my own mother tongue Hindi, which did not exist before.

And not just the language, respect for other cultural symbolssuch as Thirukkural of Thiruvalluvar, river Cauveri, Chola monuments, etc. is noticeable everywhere in Tamil Nadu. The people here attach much importance to culture, respect to elders, and believe in an equitable way of leading life – preserving the millennia old Tamil identity, while also adopting modern advancements that mark today's world.

The bond that I struck with Tamil Nadu in 2008 has remained strong to this day. After coming here in 2008 for the first time, I have never left since. Today I can speak Tamil fairly well, and can even read and write in Tamil. My aadhar card and passport list my address as Trichy, Tamil Nadu, I even own farm land here. I have spent more number of years in Tamil Nadu than I have in Rajasthan. In mind and spirit, I am a Tamilian.

After admission formalities, I got allotted to the hostel annexed to ACS Medical College, in Vellappanchavadi, a little beyond a place called Vanagram. After staying there for a year, before moving to a rented house just in front of the college in Maduravoyal, behind the petrol pump that is situated right in front of the college, in front of the S V Mahal, where I stayedfor the next three years with a few friends.

In our class, there was a surprisingly large percentage of students from Bihar. It was great fun interacting with them; they are a free spirited lot. Approximately 30% of the class comprised of students of Tamil origin, 60% of Bihar origin, and 10% from other states.

The curriculum in MGR college is mostly same as any other engineering college, including IITs. The facilities such as welding workshop, foundry workshop, computer labs, lab for drafting software such as autocad etc. .

also is a standard, that is enough to ignite the interest in the mind of any student who is curious and eager enough to learn. The same goes for academics as well. The faculty is a mix of good teachers who are good if the student is good .Some of the other good teachers that still occupy a place in mind from that time are Nikhila N L, Manoj Babu, S Suresh, G Raja, and AG Srinivasan. I was a disciplined student right from the beginning. These teachers took note of it, and made effort to guide and encourage me whenever need arose.

The early memories in a new place and terrain will always be etched in everybody's mind and that is no different for me either. Engineering graphics as a subject and the faculty who guided us through it, impressed me, rather in many a ways.

Graphics, class would fall on Tuesdays for four straight hours. After every class I used to be left spellbound by the our sir's, mastery over the subject. I would sit in rapt attention for all four hours on every Tuesday, while sir would go on hammering fine details without showing any signs of tiring. After coming to hostel too, i would practice drafting drawings using the drafter, for several hours. Most other students struggled to remain attentive in the last hour. Not me. I was having an enriching time.

The bond with Shri.Andrew Nallayan sir continued in subsequent semesters too, I remain in touch with him even today.

In third and fourth years, I began preparing for GATE examination. June 2010 – February 2012 was an amazing journey of 19 months that culminated in AIR 166 rank in GATE 2012, and admission letters from IIT Kanpur, IIT Delhi, IIT Roorkee, IIT Mumbai, and IIT Madras in my hand. The disappointment from four earlier, got washed away with this.

I joined IIT Madras in July 2012 for doing M. Tech in Thermal Engineering. After about 8 months there, Igot called for interview by IOCL, NTPC,BHEL, and BPCL based on GATE 2012 score. In February 2013, after getting selected in BHEL, I discontinued M. Tech in IIT Madras to join BHEL Trichy as an Engineer Trainee. I have been here at BHEL Trichy since then.

If you are preparing for GATE, it is important to give yourself abundant time to give yourself the best chance of doing well, so start preparing as early as possible. GATE is a gateway to not just M. Tech in IITs and NITs, but is also used by many PSUs as the determinant to select candidates for interview. Today, a large number of PSUs hire from GATE, it is therefore a truly worthwhile exercise to put effort in preparing for GATE.

A PSU – short for Public SectorUndertaking – isan enterprise in which majorityof the stake is owned by the government. So all rules and benefits of government apply to employees of PSUs. A job in PSU is as good as a government job, it comes with decent pay, good benefits, and job security.

If you are doing B Tech, and are not yet sure about what you are going to do after passing out from college, give serious consideration to preparing for GATE. A good performance in this three hour exam ensures a comfortable life for the next thirty five years!

Another benefit of preparing for GATE examis that if you don'tdo well in GATE, you can keepIES exam as a plan B, because if you have covered GATE syllabus fully – you would have automatically covered 60% of the syllabus for IES exam too.

If you are a student presently studying B. Tech, I would like offer following advice to you:

1.Pay good attention to academics in college. Lead a disciplined routine. This discipline is not just important for getting marks, but also because the discipline acquired in college prepares you for the life ahead in general. Habits and way of conduct acquired in college are like a foundation of a building. If the foundation is shaky, the building would never be good.

2.If you are in mechanical engineering, try to gain a good grip over Strength of Materials, Thermal Engineering, Design Engineering, Fluid Mechanics, Engineering Drawing, Mechanics of Machines, Manufacturing Engineering, Operations research, and Mathematics. These subjects are important not just for GATE, but also for all other exams that are based on Mechanical Engineering. In work life too, knowledge on these subjects comes in handy.

3.Try to stay away from liquor, smoking, and romantic relationships. There is lot of time in life ahead for these things. Do take this as good intentioned advice (and not as moral policing) from a big brother who walked the same path as you are doing, 10 years ago.

Almost 10 years after passing out from college,I can put in perspective the years spentin MGR college. This college is a laidback place, the infrastructure and faculty are fairly good, the curriculum pressure isn't too extreme. If a student is determined enough to do well, the laidback environment of the college allows him to first figure out calmly what he wants to do with his career, and then use these four years to lay the platform for that career.

I was fortunate enoughthat I figured out early that what I wanted to do was to do well in GATE.I was also fortunate to have the teachers, especially the ones I have mentioned above, who were kind, compassionate enough to provide good guidance whenever I needed it in college.

In BHEL, as a welding engineer – the times have been exciting. BHEL Trichy, spoken of in industry as the Mecca of welding, is an excellent place to learn about welding. In ATP department where i am posted, we manufacture Steam Generators (SG) for Nuclear Power Corporation of India Limited (NPCIL). The SGs have to be installed in nuclear power plants run by NPCIL, for commercial power production. The entire fabrication exercise must be done in accordance with ASME Boiler and Pressure Vessel Code (BPVC).

As a welding engineer, my job is to ensure that all welding that takes place is compliant with ASME BPVC. It is the compliance to Code part which makes the work exciting. ASME BPVC is a magisterial document that runs into thousands of pages, it is prepared by American Socity of Mechanical Engineers (ASME), it covers every aspect of fabrication – starting from raw material selection, welding consumables selection, design of equipment, qualification of welders and welding procedures, nondestructive examination of materials and welds, service and maintenance, etc.

In the fabrication exercise, my job is connected to all aspects that are related to welding. This involves procuring nuclear-quality welding consumables, qualifying them in accordance with ASME BPVC, qualifying the welders, qualifying the welding procedures, issuing Welding Procedure Specification (WPS), and then finally – surveillance of the production welding. Demonstrating compliance to ASME BPVC is an intricate exercise, and involvesknowing the Code with intimacy. The work is quite technical.

Welding is like a sea. There is endless learning in the field. There are constant improvements in the industry. Interesting new ways of welding have been developed, which make possible high quality welding and high volume welding in a short time, and with economy.

All the best.

RANK HOLDER'S DECEMBER 2020 EXAMINATIONS: MECHANICAL ENGG:

I ST SEM:

JAISON-Ist Rank

SUMIT KUMAR -II nd Rank

REHOBOTH JONATHAN.F -II nd Rank

III RD SEM: PRAMOD KUMAR-I st Rank

SAKTHIVEL.S- II nd Rank

V SEM: RAHUL .M- I st Rank

PAWAN MUSYUNI-II nd Rank

VII SEM: HARISH BARMAN-I st Rank

PINNINTI PURNA SAI TEJA - II nd Rank

ROBOTICS AND AUTOMATION ENGINEERING I ST SEM :

KOYA MEGHANA DURGA –Ist Rank

BHARATH -II nd Rank

III RD SEM : SARAVANAKUMAR .B - Ist Rank

PRAVEEN V- IInd Rank

V SEM : BHUVAN CHAND CHALASANI-I st Rank

KAMISETTY MUNI HESHWANT KUMAR- II nd Rank

AUTOMOBILE ENGINEERING I ST SEM : KURRA BALAJI- Topper

III RD SEM : GADDE SIDHARDA - I st Rank

T.LAXMI KUBERAN - IInd Rank

V SEM: PREMOBRATA BISWAS –Ist Rank

RAHUL KUMAR - IInd Rank

PUBLICATIONS

STAFF PUBLICATIONS APRIL-JUNE 2021

APRIL-JUNE 2021

TITLE OF THE PAPER	NAME OF THE AUTHOR	JOURNAL/ CONFERRENCE	MONTH-YEAR OF PUBLICATION
Analysis and comparison of thermal conductance and indoor air temperature on industrial slag with conventional bricks	<u>Madhusudanan, S.,</u> <u>Nallusamy, S.</u>	International Journal of Ambient Energy	APRIL-2021
Hydrogenation of aromatic nitro compounds to amines on nickel and iron- containing catalysts	Subramanian Sendilvelan	Rasayan Journal of Chemistry 14(2):1223-1229 DOI:10.31788/RJC.2 021.1426124	MAY-2021

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Rayapati Nitish III Mechanical Engineering

Ravi Kanth Patel III Mechanical Engineering

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