

Mechanical
Engineering

Aspire

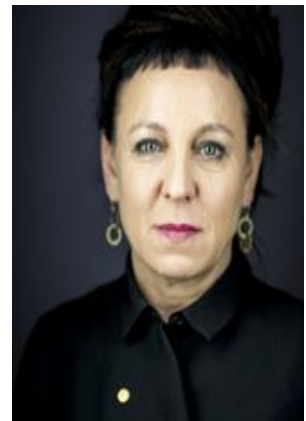
Achievements in Sports, Projects, Industry, Research and Education

All About Nobel Prize - Part 85

OLGA TOKARCZUK

Olga Nawoja Tokarczuk is a Polish writer, activist, and public intellectual who has been described in Poland as one of the most critically acclaimed and commercially successful authors of her generation. In 2019, she was awarded the 2018 Nobel Prize in Literature. The Nobel academy said Tokarczuk provided “a narrative imagination that with encyclopedic passion represents the crossing of boundaries as a form of life.”

Olga Tokarczuk was born on 29 January 1962 in Sulechów near Zielona Góra to a family of teachers. Her father worked at a school library, where she became interested in literature as a child. After studies in psychology at the University of Warsaw, she made her debut as a fiction writer in 1993 with *Podróż ludzi Księgi* (The Journey of the Book-People), a parable set in 17th-century France and Spain where characters are in search of a mysterious book in the Pyrenees. The book was well received and was awarded the Polish Publisher's Prize for the best debut of 1993-94. Still, her real breakthrough came with her third novel, *Prawiek i inne czasy* (Primeval and Other Times), published in 1996. This subtly constructed family saga is set in a mythical place with strong symbolic impact, simultaneously full of realistic and vivid details. It starts in 1914 and, in several succeeding generations, deals with the Polish history of the 20th century. Tokarczuk has claimed that the narrative was a personal attempt to come to terms with the national image of the past.



But the device of a linear fable with an omniscient narrator, and a strong metaphysical undercurrent, are abandoned in the impressive *Dom dzienny, dom nocny* from 1998 (House of Day, House of Night). In this rich blend of beautiful and striking images, one finds the intention to depict a whole region with many and conflicting cultures, individual fates, and perspectives. Tokarczuk is inspired by maps and a perspective from above, which tends to make her microcosm a mirror of the macrocosm; as stated in her third novel - Primeval is a village in the midst of the universe. Likewise, myth and reality are intimately connected in *House of Day, House of Night*.

The early inclination to Jungian models of interpretation is gradually dissolving in the short stories - Gra na wielu bębenkach from 2001 and more forcefully in the novel - Bieguni from 2007 (Flights). In the latter, she is concerned not so much with the landscape of the border as with the phenomenon of border-crossing. The title is taken from the name of an old, Russian, gnostic sect whose members believed that constant movement prevented the triumph of the evil demiurge. Even here, Tokarczuk is driven by the attempt to contain a multitude of often contradictory perspectives into one whole. In this pursuit, she includes old maps of wanderings that convey an impression of a vast encyclopedia, mirroring a world in constant flight. Her montage of diverse fragments of narrative and essayistic prose is full of memorable reflections and episodes, where the recurring tropes are physical movement, mortality and the meaning of home.

Tokarczuk never views reality as stable or everlasting. She constructs her novels in a tension between cultural opposites: nature versus culture, reason versus madness, male versus female, home versus alienation. And this is possible only if both poles are anchored in the narrative. In the technically more conventional 2009 crime novel - Prowadź swój pług przez kości umarłych (Drive Your Plow Over the Bones of the Dead), the main character shares the story from her point of view. Janina Duszejko, an old woman, eccentric in her perception of other humans through astrology, relates a series of deaths in a rural area near Kłodzko, Poland. She explains the deaths as caused by wild animals in vengeance on hunters.



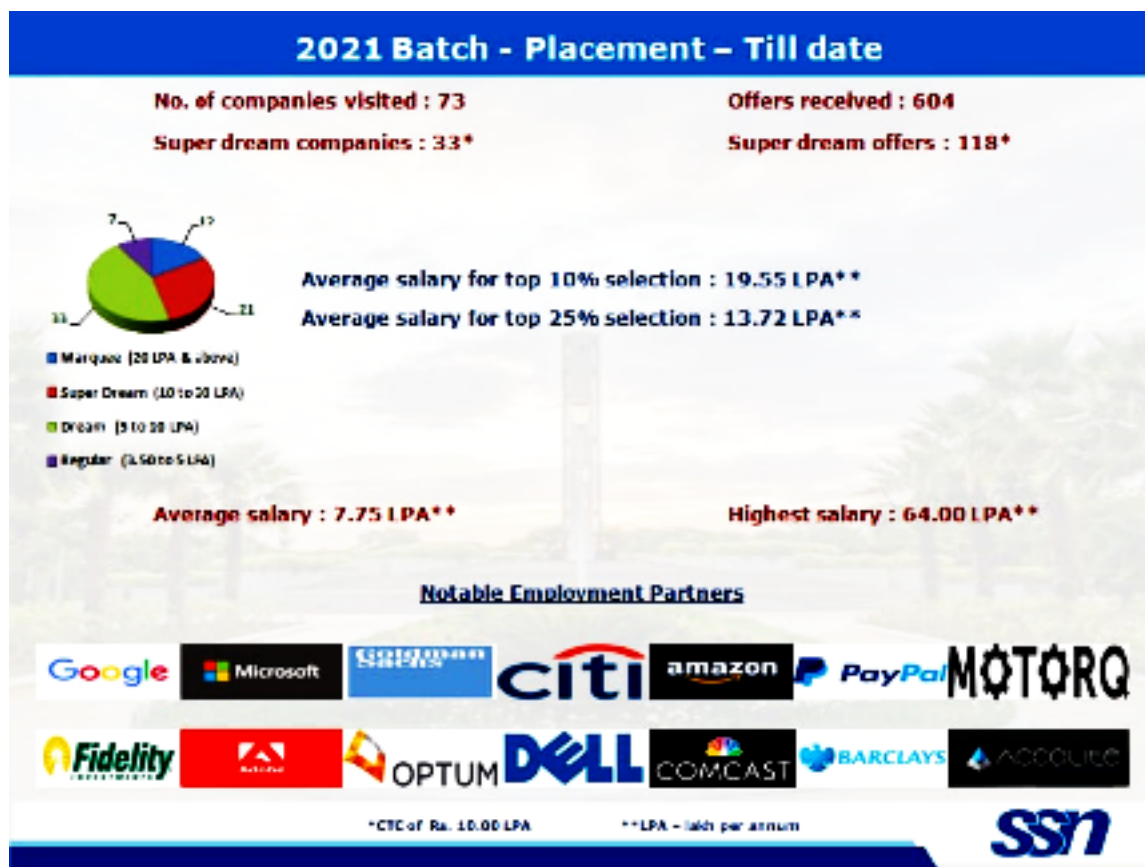
The magnum opus of Tokarczuk so far is the impressive historical novel - Księgi Jakubowe from 2014 ("The Books of Jacob"). Once more, Tokarczuk changes mode and genre, and has devoted several years of historical research in archives and libraries to make the work possible. The book recounts the history of Jakub Frank, a Jew who, as a religious leader, led the conversion of his compatriots to Catholicism in the 18th century. It is fascinating how Tokarczuk lets us enter the minds of several persons in this 1000-page-long chronicle to give us a portrait of the main character, while he himself is described only from the outside. He was clearly a man of many faces: mystic, rebel, manipulator, and trickster. Tokarczuk has in this work shown the supreme capacity of the novel to represent a case almost beyond human understanding.

In addition to the 2018 Nobel Prize in Literature, Tokarczuk has received many awards, amongst which include the Polish Association of Literary Publishers Award, the Kościelski Foundation Award, and the International Literary Award Kulturhuset Stadsteatern in Stockholm. In 2008 and 2015, she became the two-time recipient of the Nike Literary Award and won the Nike Readers Award five times.

Source: <https://www.nobelprize.org/prizes/literature/2018/summary/>

Campus Update

SSN Placement Update



Shiv Nadar University Launches MBAX Program for Working Professionals [Read More](#)

MBAX Accelerate your career with a rigorous MBA (Executive) degree program from Shiv Nadar University that you can pursue alongside your career in a flexible mode. Designed especially for working professionals.

Program Highlights

- Top-tier Faculty
- 1000+ Hours of Classroom Training
- Weekend Classes
- Focus on technology innovation and entrepreneurial thinking
- Immersion Programs with our International Partner Universities
- Entrepreneurial Opportunities
- Specialized Curriculum for New-Age Businesses
- Interdisciplinary Environment
- Dynamic Delivery of a Rigorous Program

Shiv Nadar University, India's leading multidisciplinary and research-focused university, has launched MBAX - a full-time management Degree program designed especially for working professionals.

Fit India Cyclothon



As a part of the Government of India, FIT INDIA program, Department of Physical Education, Sri Sivasubramaniya Nadar College of Engineering organized the Cyclothon event for our staff members. Cycling is one of the best ways to remain fit and healthy. Fit India Cyclothon, event an initiative to create awareness on fitness through cycling.



Department Update

Placement Update

We have received two offers from Latent View Analytics after the recently concluded virtual selection process.



latentview

Actionable Insights • Accurate Decisions

Company Name: **Latent View Analytics**

Role: Graduate Engineering Trainee- Analyst

Student Details: 1. ManojKumar M

2. Steve Mitchell R

CTC : 5.5 LPA (Dream Offer)

Note: LTA had different rounds this year. Each and every round was an elimination round. There was a written test, GD, Tech and HR rounds. This time, they had two

Technical Rounds (one for testing the Core discipline knowledge in subjects like Thermodynamics, SOM, Design, DOF Projects, Power Plant Engg., and so on and other Tech round was on Programming language like Python, knowledge in Statistics & Data Analytics, Solving Puzzles and so on). Every round was an elimination round. Following the two Tech rounds was the HR round.

Among those applied from SSN, only 4 got through from Mech this time to the Tech Rounds. It was finally two who were successful from our Dept. clearing the HR round.

It was heartening to note how our students performed in the different challenging rounds. Noteworthy to mention is the Appreciation that Manoj Received from the HR for his Mannerisms and Courteous approach during the GD. When none commenced the discussion during GD, Manoj started off his discussion with an open request to his team members asking for if there was any who wanted to talk first. Similarly, during the end, he reminded the team if there was someone who missed their turn. Only after ensuring that everyone had their chance, he summarized the discussion. The very attitude of "Let Others Win" (Similar to Google) made Manoj win the heart of the HR with a special mention of the same during his HR round!! Actually his HR round commenced with appreciation!!

As regards the Tech round, when Manoj was asked about the Programming skills that he had gained as he hails from a core background like Mech, he immediately made a practical demonstration with his own homepage he had recently created using Python. The director of the company was impressed with the way Manoj explained his self-written Python code. Being Original helped him a lot!

About the other student - Mithcell had his own path chiselled for his success journey with LTA. Really, great to hear about. I understood that the company's expectations grew up to Cloud Computing Techniques from our Students despite their background being 90-100% core.

Moral: Digital and Coding skills are becoming essential for Mech students. More such skills needed to create More opportunities...It's time to change gears.

Thanks for your time and the placement count is 14 till date. Royal Enfield, MRF first level got over. Some more in the pipeline. Let's have to wait and see. A lot more to be done to have the placement count rise beyond our average placements. I need your kind support and encouragement.

CTS/TCS/Infosys placement



Glad to let you know that we have added **33 new offers** through the Bulk Recruitments of CTS/TCS/Infosys, out of which 12 students have received multiple offers from CTS, TCS and Infosys. Placement Count is $33+14 = 47$ Till date.

Note: This year the Bulk Recruitments results are not encouraging. Usually we will get near 70+ or 60+ after the bulk recruitments. Recruitments had considerably shrunk this time with CTS/TCS/Infosys due to pandemic effect. This had a severe impact on core disciplines like us. Anyway, I am making an Analysis and wish to find out why the number has gone down for us this year.

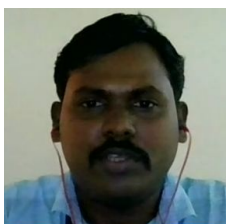
Dr. N. Lakshmi Narasimhan

PhD Viva Voce- Anna University



Ph.D Public Viva-Voce Examination of my part-time research scholar **Mr. Renjin J Bright** was held on 16 December 2020, Supervisor: **Dr. G. Selvakumar**.

His PhD Thesis is on Preparation and Characterization of AA6082-Metakaolin/Silicon Nitride Hybrid Metal Matrix Composite



Mr. R. Rajasekaran, Ph.D Public Viva-Voce Examination was conducted on Wednesday, 30th December 2020 at 11.00 A.M., in the Department. Supervisor: **Dr. A.K.Lakshminarayanan**. Title of the Thesis: Effect of welding processes on microstructural characteristics, mechanical

properties and stress corrosion cracking behaviour of 316LN Austenitic Stainless Steel Joints



Anna University Rank Holders: Mech 2020 Passed-out Batch

Five students of 2016-2020 batch Mechanical Engg. secured university ranks in Anna University examinations. The details are as follows.

Anna University Rank Holders, April-May 2020

Sl. No.	Register No.	Name	Rank
1	312216114008	Akhil C Kuriakose	5
2	312216 11 025	Balakrishnan R	6
3	312216 114126	Vinaya Krishna	9
4	3122 16114007	Ajaykumar J	10
5	312216114082	Raghul Kanna S	24

Invited Talk



Dr. KS Vijay Sekar delivered an invited talk at the Two day workshop on "Instructional strategies for effective online teaching of engineering graphics" organised by the Dept. of Mechanical Engineering, Saveetha Engineering College on December 5-6, 2020.



Dr. S. Rajkumar, delivered a guest lecture on "Combustion modelling of biofuel engine" at the FDP conducted by Automotive Research Centre (ARC) of Vellore Institute of Technology(VIT), Vellore on 06.12.2020.

Journal Publication in Science Citation Index Expanded



MM Metro and Dr. M. Selvaraj, Effect of Alumina Trihydrate with Acrylonitrile Butadiene Styrene / Graphene Nanoplatelets and Basalt Fabric on Property Enhancement, Digest Journal

of Nanomaterials and Biostructures 15 (3), 2020, pp. 953 – 962

During the last several decades, polymeric composites have attracted much attention from researchers and industrialists due to their excellent mechanical and thermal properties. Currently, these materials are gradually replacing metallic parts in bearings, home appliances, and electrical devices. This study investigated the physical and mechanical responses of thermoplastic composite laminates fabricated from acrylonitrile-butadienestyrene polymer, graphene nanoplatelets, alumina trihydrate powder, and



single-ply woven basalt fabric reinforced by a hot-pressing method.

EXTERNAL FUNDED PROJECT APPLIED



Dr. S. Rajkumar, Assoc. Prof/ Mech, Project Title: Upgradation of Municipal Solid Wastes into Commercial Grade Fuel using Co-Liquefaction and Study of its Effects on Performance and Emission characteristics of Dual Fuel Compression Ignition Engine, PI: Dr. S. Rajkumar/ASP/Mechanical Engg; Co-PI : Dr. K.P. Gopinath /ASP/Chemical, Total Budget (INR): 1,763,790. Funding Agency: AICTE RPS 2020.



Dr. S. Vijayan, Assoc. Prof/ Mech, Dr. S. Vijayan (PI), Dr. I. Jayakaran Amalraj (Co-PI) and Dr. Satheesh Kumar Gopal (Co-PI) **delivered a presentation** before the Expert Committee on 18th December 2020, for the project proposal titled "Tribal Syndicate: One stop solution for the tribal community" under the Tribal Sub Plan (TSP) Scheme of Department of Science and Technology.



Dr. A.S. Ramana, Assoc. Prof/ Mech, Project Title : Development of Cost Effective device to detect the Fouling process in Air Handling Units (AHU) PI: Dr. A. S. Ramana /ASP/MECH Total Budget : Rs. 3.7 Lakhs Funding Agency : ASHRAE. With the assistance of **Mr. Faris Ahmed** AICTE NDF Research Scholar.



Dr. N. Lakshmi Narasimhan, Assoc. Prof/ Mech
Project Title: Proposal For Setting up of a Joint R&D Centre at SSN, PI: Dr. N. Lakshmi Narasimhan / ASP / Mech;; Co-PI: Dr. K. Rajkumar / ASP / Mech, Funding Agency: M/s Preethi Kitchen Appliances Pvt. Ltd.



Dr. Vijaysekar KS writes: I had the opportunity to apply for external funding for enabling an Agricultural Start Up with a seed funding of 25 lakhs along with my colleagues Dr. G. Satheesh Kumar, Dr. Vimal Sam Singh, Dr. N. Bhalaji from IT dept along with external collaborators Dr. L. Natana Sabapathy, Adani Foundation and Mr. Suresh Kumar, Barola Technologies. The proposal was submitted to NIAM Agri-Business Incubator (NABI), CCS National Institute of Agricultural Marketing (NIAM), Rajasthan.



Our motivation was: 'The farmer is the most vital cog in the food production - consumption cycle, who toils his heart and soul out to sow, tilt, nurture, harvest the food that we consume, but is often at the receiving end of uncertainties in



terms of getting a good yield and genuine price for his crops. We have repeatedly witnessed farmers committing suicides due to the pains that come from poor harvest, inclement weather conditions and inability to pay for loans. We wanted to facilitate the farmer with an innovative easy to use application that will help him connect with potential consumers thereby fetching him a good yield and good price. The application has the potential to include geo fencing, create more visibility, tap the tacit knowledge of the farmer to take it to the next generation, create a farm management system'. I am thankful to the team for their invaluable inputs, critical feedback and empathetic listening, all the while keeping the interests of the sons of the soil paramount and wanting to make a difference to their livelihood. One hopes the journey that we have begun will go beyond the fortunes of this funding proposal...

INTERNALLY FUNDED FACULTY PROJECTS 2020 - 2021 funded by Sri Sivasubramaniya Nadar College of Engineering

S	Name of the PI/Co-PI	Title of the Project	Yrs	lac
1	Dr. N. Nallusamy Dr. M. Srinivasan	Development of High quality Ge doped Indigenous mc-Silicon ingot and wafers for Solar Cell applications	3	4.0
2	Dr. Koteswara Rao Dr. AK Lakshminarayanan	Wire arc additive manufacturing of functionally graded materials and intermetallics using twin filler gas tungsten arc	3	6.0
3	Dr. M. Nalla Mohamed	Investigation on crashworthiness analysis of hybrid cylindrical corrugates tubes for automotive applications	2	4.5
4	Dr. M. Selvaraj	Variable stiffness vibration absorber with feedback control	3	3.5
5	Dr. M. Suresh Dr. S. Rajkumar	Hydrothermal liquefaction of biomass wastes and experimental investigations on emission characteristics of dual fuel compression ignition engine	3	6.3
6	Dr. C. Arun Prakash	Vision based reconfigurable drone for surveillance and monitoring	2	5.0

Faculty Write up

Invited Talk Organized

"A Motivational Talk by a Successful Entrepreneur" was Organized on Dec 18, 2020, online as part of the activities of the "Institution's Innovation Council (IIC)" formed at our campus. The objective was to enlighten the aspiring minds at large on Entrepreneurship. **Mr. Girish R Viswanathan**, a successful Entrepreneur and Founder of Earthonomics was invited to deliver the talk. As many as 50+ participants both students & faculty members attended the online talk. The session was very interesting touching the key aspects of Entrepreneurship stressing the importance of the Three P's (People, Planet, and Profit) essential for modern-day business. The session was well received which was evident from the Feedback of the participants. Our special thanks to Mr. Girish and our dear students for making the event memorable.



Dr. N. Lakshmi Narasimhan

Notable Gesture of two of our Mech 2020 Batch Students

A short brief note of appreciation from Dr. N. Lakshmi Narasimhan

Recently, one of our 2020 Batch students, S.S. Balakumar got an Offer as GET from Wheels India. It was an off-campus drive conducted by Wheels India. The message and the application form was

shared through the employees and by chance his batchmate Niranj Kumar (312216114702) of Mech A, 2020 got this info from his known circle and passed it onto the student Placement Coordinator of his batch, Rahul B, who immediately shared the info with his batchmates. Some of them responded to the call and it was Balakumar (around 8.8 CGPA) who was called for an interview by Wheels India. Post the successful performance, Balakumar won the offer as GET. A job offer from a premier core company at this testing time is very heartening News. All credit goes to Niranj of Mech A and Rahul of Mech B. No doubt, Balakumar gave a wonderful performance and got the job on his merit. Yet, the info sharing on time is what is being weighed high at this point. Info should reach the right people at the right moment for the right person to benefit. This is certainly a standing and wonderful example of how peers can be a game-changer in one's life! It's an alarm for All those passed outs and juniors too from our dept. to rise to the occasion and support each other. Obvious that everyone is carrying the image and future of their Alma Mater with equal responsibility.

Come On! Let's Do it! and Keep Doing !!

Congrats !! Niranj Kumar and Rahul B of Batch 2020 !!

Invited Talk by Mr. Sivasankaran N, Preethi Kitchen Appliances

"A Motivational Talk by a Successful innovator" was Organized on Dec 30, 2020 via online as part of the activities of the "Institution's Innovation Council (IIC)" formed at our campus. The objective was to enlighten the aspiring minds at large on "Innovation". **Mr. Sivasankaran N, General Manager & Lead Member of the Innovation Team, Preethi Kitchen Appliances Pvt. Ltd., Chennai**, was invited to deliver the talk. As many as 50+ participants both Students & Faculty members attended the online talk. The session was very interesting addressing the Quadrants of Innovation Matrix (Incremental, Radical, Sustaining and Disruptive), key aspects of Innovation (Problem, Customer, Solution and Differentiator), Methods of nurturing Innovation, Opportunities, and so on. The session was well received that was evident from the feedback of the participants and their insightful interactions with the speaker. Our special thanks to Mr. Sivasankaran and our dear students for making the event memorable. As a coordinator, I wish to file my thanks with due acknowledgments to our

Management, Principal and HoD/Mech for the opportunity given. A special thanks to Dr. Sureshkumar S., ASP/Mech for the support extended.



Convener: Dr. N. Lakshmi Narasimhan

Orientation towards Multidisciplinary projects

Dr. Satheesh Kumar Gopal on the programme organized for 1st year KCG students

The objective of the programme was decided in consultation with the Principal of the institute and the Head of E&I Department in the month of November 2020. Since the engineering world is oriented towards interdisciplinary domains of research it is logical for the students across domains to be exposed to the project ideas, key to identify engineering problems and identify the prospects of patenting for any project ideas and solutions. The 1st lecture was delivered on 26.12.2020 through online mode on Microsoft teams. Designed for the 1st year students of KCG College of Engineering, the sequence of the programme is listed below:



S.No.	Mode	Topic & Explanation	Time
1.	Lecture	Introduction to practical aspects of robots	1-1.5 hours
2.	Live Demo	Using a microcontroller for sensors & actuators	1-1.5 hours
3.	Live Demo	Building a simple tracking robot	1-1.5 hours
4.	Lecture	Figuring out Project ideas and Path to patenting	1-1.5 hours

What better way than to jumpstart right at the starting point of their engineering career!

One Day National e-Workshop on Recent Trends in Automobile Engineering

Resource Personnel:

- Dr. N. Kulasekaran, Simulation Metier Leader – CFD, (Mechanics Technical Leader), Valeo India Pvt Ltd, Chennai
- Dr. J. Thangaraja, Associate Professor of Mech. Engg., VIT University, Vellore
- Mr. Rubesh Dhananjayan, Digital Designer, Liliun Gmbh, Aviation design industry, Germany

The Department of Mechanical Engineering organized a national level one-day e-workshop on Recent Trends in Automobile Engineering on **23rd December, 2020**. Eminent speakers from Industry, Academia and an International Design Engineer gave lectures on trending topics such as **CFD Applications in Automobile Industries, Fuel Cells and Significance of Industrial Design in Product Manufacturing** respectively. Many students and faculty from SSN and other colleges attended the



workshop. The sessions gave valuable insight into the current automotive requirements and the possible future technologies. The workshop was interactive, thought provoking and professional. The feedback received from

the participants was good. Students particularly felt that the knowledge they gained during this workshop will help their career in industrial automotive design. They said they are looking forward to more such sessions on current trends in engineering and what current industries need. We sincerely thank SSN College of Engineering for helping us conduct this workshop.

Report by Dr. S. Rajkumar, Dr. R. Prakash, Mr. B. Jayakishan

Paper presented in Intl. Conference

Dr. M. Nalla Mohamed participated and presented 5 papers along with research scholars in First International Conference on Future Technologies in Manufacturing, Automation, Design and Energy

organized by National Institute of Technology Puducherry, Karaikal, Puducherry, India on 28-30 December 2020. The paper details are given below.

- Nalla Mohamed, Effect of wall thickness variation on the energy absorption efficiency of cylindrical tubes under axial loading, ICOFT 2020, NITP, India
- Nalla Mohamed and Sakthivel G.Vr, Investigation on mechanical behaviour of kenaf fabric/bioepoxy/ egg shell powder reinforced composites for medical applications, ICOFT 2020, NITP, India
- Nalla Mohamed and Sivaprasad R, Investigation on the effect of patternised holes on energy absorption characteristics of aluminium square tubes, ICOFT 2020, NITP, India
- Nalla Mohamed and Sivaprasad R, Experimental investigation on adhesive bonded fold tubes under quasi-static loading, ICOFT 2020, NITP, India
- Nalla Mohamed M and Sivaprasad R, Numerical crashworthiness investigation of Multi-section Tubes, ICOFT 2020, NITP, India



Webinar on Identifying Intellectual Property



Dr. KL. Harikrishna organized an online Webinar session "Identifying Intellectual Property component at the early stage of Innovation" on 21.12.2020. **Dr. Ve. Annamalai**, The Principal, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, delivered the lecture for our current third year students



Activity of [NAGARAJAN S, Lab Instructor](#)

Completed Coursera - Courses

1. Design Thinking



Completed Alison – Courses

1. Diploma in Environmental Management
2. Advanced Diploma in Engineering Thermodynamics
3. Diploma in Laws of Thermodynamics
4. Manufacturing Processes - Joining Metals

e - Workshop Attended

1. Attended One Week National Youth Empowerment e-Workshop for "Personality Development and Mental Well-being in the New Normal" by Mata Gujri College, Internal Quality Assurance Cell, Punjab, India, from 25/11/2020 to 03/12/2020.
2. Attended the e-Workshop "Intellectual Property Rights: Industry-Academia Interface" by Guru Nanak Khalsa College Yamuna Nagar, Haryana on 04/12/2020.
3. Attended the e-Workshop "Recent Trends in Automobile Engineering" by the Department of Mechanical Engineering, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, on 23/12/2020.
4. Attended the e-Workshop "Recent Trends in Manufacturing Engineering" by the Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, on 29/12/2020.

Report on One Day National online Workshop on Recent Trends in Manufacturing Engineering

29th December 2020 (Tuesday)

Resource Personnel:

- Dr. Margam Chandrasekar, Founder and Director, Wise Consultants and Services Pte Ltd, Singapore.
- Mr. Ramani Balkrishnan, GM - Lean manufacturing & TQM, at GM Pens International, Chennai.
- Dr. T.R. Vijayaram, HOD- PG, Dept. of Mechanical Engineering, Bharath University, Chennai.

Summary:

The Department of Mechanical Engineering organized a national level one-day online workshop on Recent Trends in Manufacturing Engineering on 29th December 2020. The workshop was organized using Zoom. Initially 75 participants registered and finally nearly 40 participants attended the workshop.

Most of the participants were from Alpha college of engineering, Bharat University, Paavai Engineering College, SSN College of Engineering, St Joseph's college of engineering, Chennai, NIC-New Delhi, DCS Pvt Ltd-Hyderabad, Tirumala Engineering College- Hyderabad, Rajarajeswari college of engineering-Bangalore, etc.

The first keynote address was delivered by Dr. Chandrasekar from 9.30 am to 11 am. He talked about what is biomaterials, types, applications and processing methods of biomaterials.

Mr. Ramani Balakrishnan delivered a lecture from 11.15 am to 12.30 pm on Industry 4.0 and its relevance to manufacturing. In that lecture, he highlighted IOT, Cobots and essential skills and knowledge required for future students about industry 4.0.

Dr. T.R. Vijayaram handled the 3rd session from 1.15 pm to 2.45 pm. The session focussed elaborately on basics and types of composites, modern processing methods of different composites with applications. It was a very exhaustive session.





All the talks were enthusiastically received by the participants, as evidenced from doubts asked and the attendance. The organizers thank the Management, SSN College of Engineering, the speakers and the participants. We thank all our colleagues, both teaching and non-teaching staff for the encouragement and support.



Conveners: Dr. D. Ananthapadmanaban & Dr. K. Jayakumar

Shares his thoughts on an Invited Talk delivered.....

Dr. K.S. Vijay Sekar



I was invited to deliver a lecture on “Instructional Strategies for Effective Online Teaching of Engineering Graphics” by the Saveetha Engineering College on 6th December 2020. The event was conducted as a two-day workshop, aimed at bringing in experts from academia to share and discuss strategies, methods and techniques that would need to be leveraged in teaching the Engineering Graphics subject in the online mode. I made a presentation on the key challenges in teaching a subject of art and engineering and how we can make it a pleasant experience, by keeping an eye on the opportunities the virtual mode presented. I proposed a method where in black board teaching would be the primary method and can be coupled with animations, pre-recorded videos and digital tabs where possible. Off course the quality of the camera and network bandwidth posed challenges in the live streaming, which need to be taken care of. I emphasised on teaching the fundamentals of the subject with strong focus on lettering, dimensioning, constructions before moving on to other topics. Also visuals can be diligently used to convey the importance and depth of the concepts, rather than mechanically teaching the subject and an empathetic hearing to the student’s difficulties is necessary to clear his doubts and queries.

Monthly Activities and Publications

D. Vishal, M. Selvaraj, and S. Vijayan, Study of Vibration and Tensile Characteristics of Multilayer Composites, Lecture Notes in Mechanical Engineering, pp.987 – 994, https://doi.org/10.1007/978-981-15-4488-0_84

M. Selvaraj, Optimizing the Parameters for Friction StirWelding of an Aluminium Alloy, Lecture Notes in Mechanical Engineering, pp. 735 - 745, https://doi.org/10.1007/978-981-15-4745-4_65

Dr. K. Jayakumar, has acted as a Question Paper Scrutinizer for the Mechanical Engineering Board at Sri Sairam Engineering College, Chennai-44 on 17-12-2020.

Dr. C. Arun Prakash, Received "Perasiriyar Emayam Award 2020" from Kurinji Kabilar Literary Association. The award consists of a Shield, a Certificate and a Medal.

Dr. L. Poovazhagan, conducted the confirmation DC Meeting for his part-time research scholar, Mr Kulothungan on 02.12.2020

Dr. M S Alphin, Convened DC meeting for Mr. M Gopal for the approval of the Viva examiner and reviewed the report received. (09.12.2020)

Dr. S. Rajkumar, conducted the confirmation DC Meeting for his part-time research scholar, Mr. Venkatesh G on 22.12.2020 confirmation DC Meeting for his full-time research scholar, Mr. Gowthama Krishnan M on 21.12.2020

Mr. B. Jayakishan, Assistant Professor, attended One-day online Faculty Development Programme (FDP) on "Vehicle Engineering and IOT in the Automobile Sector" organized by Vel Tech Multi Tech Dr. Rangarajan Dr. Sakunthala Engineering College on 05.12.2020.

Mr. B. Jayakishan, Assistant Professor participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on ""Alternate Fuels"" from 2020- 12-8 to 2020-12-12 at University College of Engineering, Anna University."

Dr KS Vijay Sekar, attended a webinar on "Quality Assessment in Higher Education – The Need of the hour" , organised by QS IGAUGE.on December 11, 2020.

Dr. KS Vijay Sekar, attended a 3 day virtual technical program titled "Technical Sessions of the 35th Indian Engineering Congress 2020" organised by the Institution of Engineers (IIE) between December 18-20, 2020.

Dr. Satheesh Kumar Gopal, conducted the confirmation DC Meeting for his part-time research scholar, Mr M.K. Jawahar on 31.12.2020

Dr. Satheesh Kumar Gopal, attended the Faculty Development Program (FDP) on Waste Audit and Management for Fuel/ Value Added Materials Recovery, 8-12 December 2020, organized by the Centre for Waste Management, Sathyabama Institute of Science and Technology

Dr. R. Vimal Sam singh along with **Dr. S. Esther Florence** (ECE) , Mohan (Phd Scholar - ECE) , Naveed Ahamed (UG Mechanical) presented a paper on the title ""Design of a highly miniaturized novel electromagnetic bandgap (EBG) material for performance improvement in microwave components"" in the AICTE sponsored ICRIET 2020 organized by Nandha Engineering College , Erode.

Dr. R. Vimal Sam singh , Associate Professor , participated & completed successfully the AICTE Training And Learning (ATAL) Academy Online FDP on ""Micro-electromechanical Systems"" from 2020-11-23 to 2020-11-27 at SARDAR PATEL COLLEGE OF ENGINEERING"

Student write-up

STUDENT ACTIVITIES

S.No	Activity Done during this Month
1)	Sam Sherin Raj S, 3rd year, Completed an Internship in LS Mills Ltd. Theni in the Quality control and Cotton Purchase Department.
2)	Sharan V, 3rd year, Completed an online course on Excel Skills for Business: Essentials in Coursera.
3)	Achyuth Ramachandran, 4th year, Article titled "Python implementation of fuzzy logic for artificial intelligence modelling and analysis of important parameters in drilling of hybrid fiber composite (HFC)" accepted for publication in IOP Conference Series: Materials Science and Engineering, Jan 2021.
4)	Raghav Arvind T, Roshan Ram Dayal D and Survesh S, 4th year, Presented a paper on Mechanical Characterization and Comparison of Glass Fibre and Glass Fibre Reinforced with Aluminium Alloy (GFRAA) for Automotive Application in PFAM 2020

VIRTUAL RECRUITMENT

I am **R Steve Mitchell** and I would like to share my experience about the **LatentView** placement process. The entire process was completed in about 2 days. There were 5 elimination rounds with one non-elimination round.

Round 1 – Online test:

We were required to solve **38 questions in 1 hour**. The questions were a mix of aptitude, data interpretation and verbal ability questions. **The marks allotted for each question varied from 0.5 to 3 with no negative marking**. I think Agarwal book will suffice to clear this round.



Round 2 – Group Discussion (GD):

In this round, they wanted to test your communication skills and see how well you participate in the discussion. Make sure your points are crisp and clear. Be considerate of other people in your group. The time given for preparation was 3 minutes and the whole GD lasted for about 25 minutes.

Round 3 – Personality Assessment:

This was very simple with 43 very easy questions about your personality, which was to be completed in 30 mins. Be honest and confident in answering the questions. This was the only non-elimination round.



Round 4 – Technical Interview - 1:

This round was easy with basic questions from my resume and were based on my projects on machine learning. Be confident while answering. It is necessary to know at least one of the programming languages which is used in data science like python or R. They finished off with basic questions from python. This round lasted for about 20 minutes.

Round 5 – Technical Interview - 2:

This round lasted for about an hour and our knowledge of fundamentals of data science and machine learning was tested very thoroughly. Questions on the basics of statistics were asked. It is not enough to merely know the concepts of statistics but you should be able to explain them in a very simple manner with applications in day-to-day life. They covered a wide variety of topics in the field of data science. Finally, they finished off by asking about your hobbies.

Round 6 – HR interview:

This round was basically like a conversation and there is nothing to be stressed about. They asked me to introduce myself and asked me about my educational experience right from my schooling up to college. They asked me about my expectations from the company and talked about the opportunities in the company. They asked about my motto, principles and core values. They asked about my passion and my interests and asked about the changes in my life due to the pandemic. They wanted to know about you and whether you would be a right fit for the company.

I am Sai Prashant R, a 4th year mechanical engineering student. I was recently offered a job at TCS Ninja and I would like to share my experience about their placement process.

The test comprised of two rounds:

- ★ Online Test
- ★ Interview

1. Online Test

This round consisted of four sections: Verbal, Reasoning, Quants and Programming. The questions in the Reasoning section were a bit tricky and time consuming. Rest all sections were quite easy. The



programming section contained 2 programming questions; one of them was easy and the second one was a bit difficult.



2. Interview

The panel consisted of 3 members: Technical, Human Resources (HR) and Managerial Resources (MR).

They asked a few questions from the mechanical domain to make me comfortable and then moved to the technical questions. Then they asked me to write the code to check if a number is palindrome or not and asked me to explain the program with any number. HR and MR questions were straightforward and simple.

I am **Rishi Kesavan**, a 4th year Mechanical Engineering student. I was recently offered a job at **CTS GenC** and I would like to share my experience about their placement process.



The test comprised of two rounds:

- ★ Online Test
- ★ Interview

1. Online Test

Online test was based on the AMCAT platform (**Note:** you cannot navigate through the questions, so confirm your selection before moving, as you cannot change them later).

The test has normal aptitude, logical and communication questions. YouTube and placement training will help you to crack this round.



2. Interview

This round was like a mini aptitude test (No programming questions were asked)

The panel asked questions from the mechanical domain, managerial domain, and there were some general questions about me. They also asked me some aptitude questions from the topics of time and work, probability, speed and distance, and etc. Based on my answers, they made some conversations, and at last they concluded the interview. Mostly, they are looking for confidence and good communication skills. Since I faced some technical issues like poor audio quality and data loss, I would recommend you to have a good internet connection and, if possible, wear headphones.

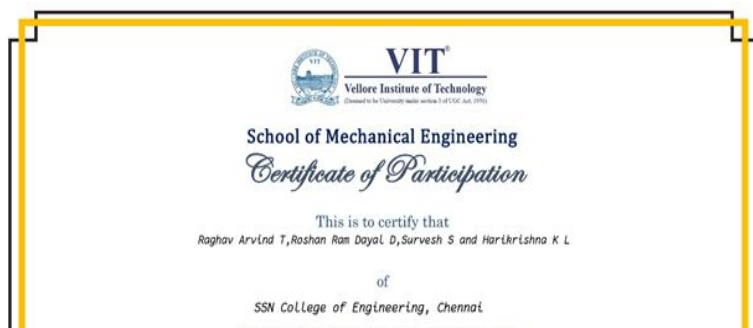
All the best!

Raghav Arvind T, IV-year, writes...

28th International Conference on PFAM (Processing and Fabrication of Advanced Materials)

Organizing Institution: Vellore Institute of Technology, Chennai

Dates: 7th and 8th December 2020



The amount of work we had to put in and the experience we gained from this conference is immense. VIT Chennai, one of many reputed institutions in Chennai, hosted a conference and we came to know about it through the promotions made by them. Thanks to Prof. K.L. Hari Krishna, our project guide, for informing us about it and suggesting to present our Internal

Funding Project (IFP). As a part of the selection process, we had to submit an abstract on our project. We submitted an abstract and it was selected. After that, we were given a template of journal paper to which we had to abide, to get our journal paper published in a prestigious journal like ELSEVIER. My team members, Survesh S and Roshan Ram Dayal D, and I had to do some painstaking work in drafting our research paper, referring to several other published literatures. Once the draft was done, we forwarded it to our project guide to proofread and make corrections. Then, our paper was ready to get published and we uploaded it on the ELSEVIER website for review. With the conference date approaching, we prepared a PowerPoint presentation on our project, which was later presented at the conference. Soon, we expect our paper to be published in ELSEVIER and it would be great if you all can take some time to give it a read.



Dr. K.L. Hari Krishna



Raghav Arvind T



Roshan Ram Dayal D



Survesh S

Linked-up Session 6, December 2020 – Tackling GRE/IELTS/ TOEFL

The 6th session of Linked-up took place on 13th December 2020. The meet was hosted by a group of final years and was received enthusiastically by the second and third years who clarified their doubts and apprehensions regarding the standard tests such as GRE, IELTS and TOEFL.

The meet started with Raghav Arvind T and Roshan Ram Dayal D from Fourth Year, Department of Mechanical Engineering elucidating the basic format of these tests. They threw light over different sections in the tests, different types of questions, the skill set required to tackle these questions and the total time to solve these sections. To further the understanding of the students they had also teased them with several sample questions from all these tests. This gave them a first-person view of the techniques and the time management skill required to crack them.

Later Raghav Arvind T, Vigneshwar Veeravagu, B Vignesh, R Swamenathan and TP Sudarsanamurthy also from the Fourth Year Department of Mechanical Engineering tried answering the questions such as “When is the best time to take GRE?”, “If coaching is required for GRE?”, “What are the best resources for self-preparation?”, “How to choose between IELTS and TOEFL?” and so on. This Q & A session ensured the meet comprehensively covered all aspects of these English proficiency tests as students poured in their doubts and got them cleared.

The meet ended with the fourth years sharing their contact with the juniors, so that they can reach back to the fourth years in the future. It was quite an eventful meet.

Q. TOEFL or IELTS?

Ans.



Q. How important is learning new vocabulary words to improving my GRE score?

Ans. Learning new words is important. However, that is not the part that matters the most. Mastering the techniques is of utmost importance.

Q. Self-study or Institute?

Ans. With an increasing number of free tutoring classes in youtube, going to an institute is absolutely not necessary. The contents and techniques taught are almost the same.

Q. Which institutes are recommended?

Ans. Magoosh, Jamboree and Princeton review are popular among students. However, an institute is not recommended.

Q. Where can we get the resources for prep?

Ans. Plenty of materials are available online. But, if standard materials are required, Manhattan's prep books are highly recommended for their contents and online access to practise tests.

ssn

LINKED-UP
Department of Mechanical Engineering

**Tackling
GRE/TOEFL/IELTS**

Vignesh Veeravagu

Roshan Ram Dayal

Raghav Arvind

TP Sudarshanamurthy

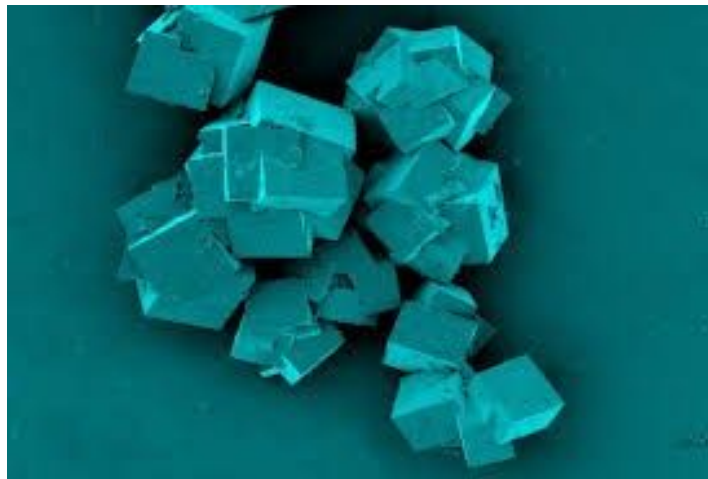
B Vignesh

Date: 13/12/2020
Time: 6:30 pm

For further details, contact
Raghav : 98406 17248
Roshan : 73973 21784

Mech Marvel - 73

Energy-storing Materials



Researchers at Lancaster University have developed a new material that can store energy for months, and potentially years, at a time. The material can be activated by light, and then release the pent-up energy on demand in the form of heat.

The team started with a metal-organic framework (MOF), materials that are famous for being very porous and as such, having an extremely high surface area. The Lancaster researchers tested out how well a MOF might be able to store energy. They started with a version of the material called a

DMOF1, and loaded its pores with azobenzene molecules. This compound is excellent at absorbing light, which causes its molecules to physically change shape.

When the material is exposed to UV light, the azobenzene molecules bend into a strained shape, and normally they would bounce back as soon as the light is turned off. But in this case, the tiny MOF pores keep them jammed in that shape, storing their potential energy in a similar manner to a compressed spring.

When it's time to reclaim that energy, the material is warmed up a little. At that point, it quickly releases its stored energy as a burst of heat. Importantly, the released heat is much higher than the "trigger" heat, so it is a net gain.

In its current form, the team says the material has a rather low energy density, but future work will focus on improving that. Eventually, the material could be used to capture energy from the Sun during the day to release heat at night, or store summer energy for winter use. It might make for a useful coating to help heat buildings, or to quickly de-ice windows and windshields on cold winter mornings.

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You can read more about this work in their [research article](#) published in the journal Chemistry of Materials.

Corporate Story - 73

Newton Vehicles




Newton Vehicle's mission is to bring a change in the automotive industry by means of a sustainable transport system. Newton Vehicles aims at creating smart, eco-friendly electric motor vehicles. The sole aim is to contribute towards reducing our carbon footprints and make driving vehicles not only affordable, enjoyable but also environment-friendly.

Newton Vehicles is an Electric Vehicle startup with a mission to Build Modular, Smart Electric Vehicles for corporates, ride-sharing taxi aggregators and city commuters to create a sustainable transportation system.

More than 9% of the Indian Population use taxis as their mode of transportation. The increasing number of vehicles is resulting in a substantial increase in pollution levels. Additionally, the vehicles used as taxi fleets have a low life cycle and need replacement in 5-6 years. This makes it quite unsustainable in the long run for companies. Newton Vehicles are working on building highly modular and smart vehicles with long life cycles for the next generation of sustainable transportation.

They make use of advanced modern age technology to reduce the charging time of Lithium ion batteries which can be swapped so that you don't need to wait for several hours to ride your vehicle. They believe in creating powerful vehicles having mind blowing instant torque, zero emission and uncompromising driving experience as compared to gasoline powered vehicles. Electric vehicles are the future of urban transportation and they are building affordable vehicles for everyone allowing them to embrace the future of transportation even faster.

Newton Vehicles has its name inspired by one the greatest contributors of science and technology, Sir Isaac Newton. Newton's laws of motion lays the basic foundation of classical mechanics. They implement their technology based on his ideology and foundations.

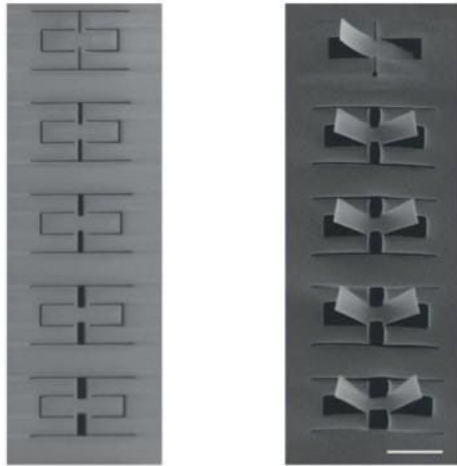


The future of Sustainable Transport

If Newton Vehicles seems like a place you'd like to work at some day, consider contacting them at contact@newtonvehicles.com.

Amazing Innovation 183

PAPER-FOLDING AT NANOSCALE



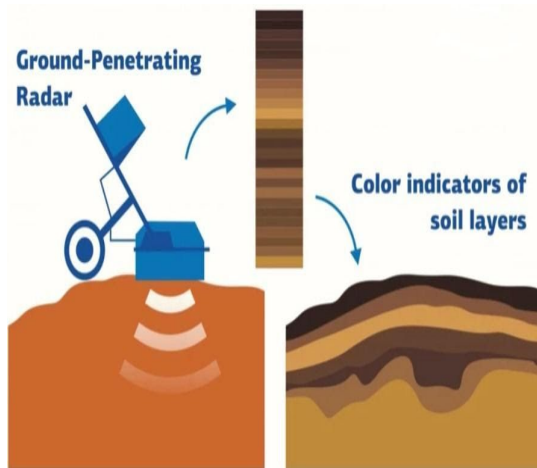
Kirigami is much like origami, except not only is the paper folded to create different shapes, it is also carefully cut in selected places to achieve the finished product. Scientists at **Northwestern University** have now succeeded in applying this technique to structures measured in the nanoscale. The team started with ultrathin films and made carefully placed kirigami cuts throughout them. Residual stresses in these films then create structural instabilities, which in turn cause shifts in and around the cuts to turn the 2D material into an engineered 3D structure. These shapes could find use in all kinds of areas, from tiny robotic grippers, to spatial light modulators for optical

applications, to controlling the flow of airplane wings.

Source: <https://newatlas.com/materials/engineering-breakthrough-kirigami-paper-folding-nanoscale/>

Amazing Innovation 184

SOIL SAMPLING USING GROUND-PENETRATING RADAR



As soil characteristics such as mineral content, density, salinity, humidity and humus content vary, the color of the soil varies accordingly. These color variations can be clearly seen in soil core samples. While handheld tools can be used to extract relatively shallow samples, more specialized equipment and processes are required for digging out longer, deeper samples. Seeking a less labor-intensive alternative, a team from **Russia's RUDN University** tried using ground-penetrating radar (GPR). Putting it very basically, GPR works by sending microwave radio pulses down into the soil, then analyzing the manner in which underground elements reflect those

signals back to the surface. No digging is required. It was subsequently found that by applying that model to GPR data alone, it was possible to determine the underground soil colors at a given site with 80 percent accuracy. That figure should improve as the technology is developed further.

Source: <https://newatlas.com/science/ground-penetrating-radar-soil-sampling/>

Alumni Info

ASK THE EXPERTS

Alumni have answered to the questions asked by students this month:

1. Can you please give me a blueprint on how to build up my career on Robotics and Automation? I could see an increasing demand for Data Analytics and Robotics . Could you suggest a work plan so that I could start progressing towards it? And also the countries best suited for pursuing Robotics in higher studies

Hello! I'm Sridhar, working in the general area of machine learning applied to robotics. There's a lot of interesting areas in robotics - mechanical design, mechatronics systems, and control theory, but I won't go into them too much as my experience in those are limited. As far as finding out which area is interesting to you, I would suggest diving into a practical robotics project which involves several components. For me this was a simple line following robot, and a little more complicated application involving hand gesture recognition. Sometimes it's not very clear even after this, so it's okay to dive into one of them and switch at a later stage.

There's a lot of online answers as to how to get started with ML, so I won't go too much into that. I would strongly suggest trying to find a mentor once you've identified your area of interest - it could be a person in the industry or a professor. Broadly, I would say there are two approaches to learning - top down approach and the bottom up approach. Top down approach involves getting into the practice of things, and picking up fundamental knowledge when required. Bottom up approach involves studying the core math and lower level details first, and then focusing on applications after. It's much easier to stay motivated in the top-down way, but the bottom up approach has its advantages. In an area like machine learning, math is critical, and I would suggest focusing on a strong mathematical foundation. At the same time, it's important not to get lost in the weeds, and this is where a mentor can help you. Strong programming skills will develop over time with more and more practical projects.

Try to get internship experience in industry, possibly at a startup, or a research project with a professor at an early stage. Practical exposure is critical, and can also help shape your interests in particular areas in the field. For me interning at a startup in my second year gave me much needed broad knowledge and exposure to robotics, and helped shape further experiences.

As far as picking an MS programme is concerned, there's a lot of online guides, and I don't think I can do it much justice in this short response. SSN provides lots of opportunities, both in terms of being flexible, as well as having structured mechanisms which foster creativity, so I would encourage you to make use of that well.

Most of all, make sure you enjoy the robotics experience! I would encourage picking up meaningful projects, collaborating with peers across departments, and broadening your knowledge via internships in various cities/universities. Happy to chat more if we connect on LinkedIn.

Sridhar – (2014-2018 batch), Member of Technical Staff, Pickle Robot Company

2. Situation in Mechanical industry and future developments..

Mechanical industries are not like IT/services/Software because those are people resource and technology oriented. Though nowadays Mechanical industries are also capitalising some software technologies, the indispensable thing is machine and facility oriented which means the capital investment is huge (factory, infrastructure and machines). You can do more automation and reduce manpower but the tangible assets needed and its necessary to invest cannot be avoided. That's why it is very difficult for the mechanical industry to overcome the losses due to recession/ market slowdown and now pandemic. That's the reason a lot of big and famous companies went bankrupt (if you see history like hmt , ambassador, etc... you can google to find more). Future will not be just mechanical but it will be mechanical, electrical and electronics, computer softwares.

For students: just mechanical skill alone is not sufficient. Mechanical engineers must infuse other skills too (mentioned above) and beauty is mechanical guys can easily grasp software technologies, hitech electronics and it's happening ... You can see in a lot of great technology companies and finance related companies, top bosses have mechanical degrees in UG or some specialisation in masters like metallurgy, fluid mechanics etc.

-Gnana Rajan (2008-2012 batch), Senior Engineer, Renault Nissan Technology and Business Centre India Ltd.

3. How do we pursue an MBA in the US? How have our seniors managed to pay the huge fee that MBAs demand? How many years does it take usually to reach a state of financial solvency after one has spent so much on a MBA program?

3.1. How do we pursue an MBA in the US?

The first step is to write a GMAT which is similar to a GRE and secure a good score in it. Sometimes universities recommend the GMAT score they are looking for, so make sure you are aware of it before applying. The second test is an English proficiency test(TOEFL or IELTS) which is used to gauge your level of proficiency in English language. Anything above 100 out of 120 is a decent score for TOEFL and above 6.5 for IELTS. After this you will have to provide a Statement of Purpose/Essay to prove your fit for the course along with letters of recommendations from peers/ professors to strengthen your application.

3.2. How have our seniors managed to pay the huge fees that MBA demands?

MS/MBA have similar fee structure, so I am answering this based on my experience. Most of my friends including yours truly secured an educational loan from an Indian Bank. I secured a loan from Punjab National Bank for a ROI of 9 percent over 10 years. Usually these banks provide a loan amount of 75 percent of your collateral. Some percentage of the tuition fees were paid by my parents. This helped me cover my tuition and living expenses for Columbia University in New York. Apart from this I did some on campus jobs to manage my living expenses. Some universities offer great TA/RA packages which might help with your living expenses in the US.

3.3. How many years does it take to reach a state of financial solvency?

Ideally if you were to put all your savings in the first 2-3 years after your MS/MBA, I think you can reach a state of financial solvency. It took me about 2 years to reach this state but I have seen people take 3 years to reach this state. But again you can also take 5 years to pay, but I would recommend paying as early as possible to avoid interests in those additional years. There is no right or wrong answer to this. It depends on your job and salary but this is a rough estimate.

- Srivatsan R (2013-2017 batch), Senior Machine Learning Engineer, Tellus.

Research news and Forthcoming events

Call for proposal (From various sources)

Department of Science and Technology (DST)

NATIONAL GEOSPATIAL PROGRAMME (NGP)

Call for proposal (short -term) for DST-NGP (erstwhile NRDMS) in Collaboration with AGNi, Office of the Principal Scientific Adviser on Geospatial Analytics for Revival and Restoring the Economic Growth in Post COVID-19 Scenario

Last date for submission of project proposal: **09-Jan-2021**
https://dst.gov.in/sites/default/files/CFP_Geoanalytics_NGP.pdf

Sustainable Regional Systems Research Networks

National Science Foundation

Sustainable Regional Systems Research Networks – Science and Technology and other Research and Development

Engineering, Mathematical and Physical Sciences, Geosciences, Computer and Information Science and Engineering, Biological Sciences, Social, Behavioural, and Economic Sciences, Education and Human Resources, Office of International Science and Engineering, Integrative Activities

Last date for submission of project proposal: **11-Jan-2021**
<https://www.grants.gov/web/grants/search-grants.html>

National Science Foundation

Focused Research Hubs in Theoretical Physics

Last date for submission of project proposal: **15-Jan-21**
<https://www.grants.gov/web/grants/search-grants.html>

Biotechnology Industry Research Assistance Council (BIRAC)

BIRAC announces request for expression of interest REOI under mission COVID SURAKSHA
– development of covid-19 vaccine candidates

Last date for submission of the project proposal: **15-Jan-2021**
https://birac.nic.in/cfp_view.php?id=58&scheme_type=37

Department of Health and Human Services National Institutes of Health

Cancer Intervention and Surveillance Modeling Network (CISNET)
Incubator Program for New Cancer Sites (U01 Clinical Trial Not Allowed)

Last date for submission of the project proposal: **20-Jan-21**
<https://www.grants.gov/web/grants/search-grants.html>

Department of Bio Technology (DBT)

NDIA-EU Cooperation on research & innovation “Green Deal: Building a low-carbon, climate resilient future – DBT ANNOUNCES CO-FUNDING PARTNERSHIP UNDER THE EU FRAMEWORK PROGRAMME ON R&I ‘HORIZON 2020’

Last date for submission of the project proposal: **26-Jan-21**
http://dbtindia.gov.in/sites/default/files/Final%20Webnoticece_INDIA-EU_Green%20Deal_22092020_0.pdf

Department of Bio-Technology (DBT)

Call For Proposal In Fundamental Research Under The Bilateral Program With Germany (DBT-DFG) Department Of Biotechnology (DBT)- Deutsche Forschungsgemeinschaft (German Research Foundation) Funding Opportunities For Indo-German Fundamental Research Projects In The Life Sciences

Last date for submission of the project proposal: **28-Feb-21**
<http://dbtindia.gov.in/whats-new/call-for-proposals>

Inspiring Life Stories



The Smart Worker

Once upon a time, a very strong woodcutter asked for a job with a timber merchant, and he got it. The pay was really good and so were the work conditions. For that reason, the woodcutter was determined to do his best. His boss gave him an axe and showed him the area where

he was supposed to work. The first day, the woodcutter brought 21 trees.

“Congratulations,” the boss said. “Go on that way!”

Very motivated by the boss’ words, the woodcutter tried harder the next day but he only could bring 17 trees. The third day he tried even harder, but he only could bring 10 trees. Day after day, he was bringing less and less trees. “I must be losing my strength”, the woodcutter thought. He went to the boss and apologized, saying that he could not understand what was going on.

“When was the last time you sharpened your axe?” the boss asked. “Sharpen? I had no time to sharpen my axe. I have been very busy trying to cut trees.”

Moral of the Story: Sometimes working hard alone is not enough to achieve success. You have to work smartly too! With the right attitude, nothing is impossible in life.

Source: <https://inspirationallife.com/inspirational-and-motivational-stories-with-moral/>

Corporate Wisdom

From the desk of Ramki -- Aspire to Inspire

Happy Morning

I often meet people who are stuck in one area of their life or another. They want a break-through, but they can’t seem to get traction.

Contrary to what they think, it’s not about having:

- More money;
- More time;



- The right contacts; or
- Better luck.

Instead, it almost always is about overcoming an invisible barrier that exists in their own head. The barrier isn't something external. It's something internal—something they have created in their own mind.

Years ago, I heard a speaker talk about a research project conducted by a marine biologist. It seems he put a barracuda in a large tank. He then released smaller, bait fish into the same tank. As expected, the barracuda attacked and ate the smaller fish. Then the researcher inserted a piece of glass into the tank, creating two separate chambers. He put the barracuda into one and new bait fish into the second. The barracuda immediately attacked.

This time, however, he hit the glass and bounced off. Undaunted, the barracuda kept repeating this behaviour every few minutes. Meanwhile, the bait fish swam unharmed in the second chamber. Eventually, the barracuda gave up.

The biologist repeated this experiment several times over the next few days. Each time, the barracuda got less aggressive, until eventually he got tired of hitting the glass and stopped striking altogether. Then the researcher removed the glass. The barracuda, now trained to believe a barrier existed between him and the bait fish, didn't attack. The bait fish swam unassailed, wherever they wished.

Too often, we are like the barracuda. The barrier isn't "out there." It only exists inside our heads.

Think how many other barriers have turned out to be only mental obstacles:

- The sound barrier. Pilots didn't think it was possible to fly faster than 768 miles an hour (the Speed of Sound at sea level). Then Chuck Yeager officially broke the sound barrier on October 14, 1947.
- The four-minute mile. Runners didn't think it was possible to run a mile in less than four minutes. Then, in 1954, Roger Bannister ran it in 3:59.4.
- The two-hour marathon. Endurance athletes didn't think it was possible to run a marathon in less than two hours. Now several athletes are on the verge of breaking Geoffrey Mutai's world-record of 2:03.02.

The reason why most of us don't accomplish more is that we set our goals inside our mental barriers, where it's safe. (That's why it's called "The comfort zone."). But if you want to get unstuck and start getting traction again, you have to set your goals on the other side of the barrier. You don't have to get crazy, but you do have to stretch yourself and push past the invisible barrier in your head.

This is the secret to achieving break-through results.

Moral of the story...

Just like the barracuda, most of us stop ourselves from trying again just because we have experienced failures in the past. We think that since we failed before, trying again would be futile as the result would probably be the same. We prefer to die rather than try, just like the barracuda. We have been conditioned not to try anymore because of the fear of failure. To be successful we have to get rid of this limiting belief, and accept a new and empowering belief, “the future does not equal the past”. What’s past is just history, the future will be different. If we have failed earlier, we need not worry, just stand up and try again. It doesn't mean that we are going to fail all the time. So let’s not get hit by the phobia of losing again. Success will not come on the first try. We use the ‘trial and error method’ to achieve success; this means that if we have not failed before, you are not going to discover how to succeed.

Please keep asking yourself a Question: What goal do you currently have that is outside your comfort zone?

#WishingMostAndMore

Have a great day & a wonderful week

R. Ramakrishnan

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