

INCEPTION: THE EARLY YEARS

Government Engineering College, Thrissur has come a long way in sixty years, with the campus and everything inside occupying an iconic position amongst educational institutions in Kerala. However not many know of the humble beginning the college had, in a temporary building and with borrowed labs



VR JAYADAS

The names were prominently published in the front page of the news paper. It was those of the people who had been selected to join the pre-professional course in Engineering. The year was 1958. My name was there in the early part of the list. Obviously I was overjoyed. I received a few congratulatory letters from friends and relatives for being selected for the engineering course. Telephones were luxury royale in those days and therefore absent in almost all households.

On the appointed day, I reported at the college with all the credentials. The office superintendent examined those details and okayed them in no time. He directed me to report to the principal. Prof. S. Rajaraman was attending to his regular business in addition to interviewing the new entrants. Prof. Mathew of the Mechanical Branch joined him. I was allotted the Civil Engineering branch. Being from Thrissur, there was no need for hostel accommodation, they observed. The interview was over in two minutes.

The campus of the newly started Thrissur Engineering college was located at Chembukkavu. The building was said to be occupied by the Munsif Court. Presently the building houses three institutions — Govt Technical High School, Govt Vocational Higher Secondary School and Govt Institute of Fashion Design. The District Registrar Office was located on the opposite side of the road. Adjoining the District Registrar Office on to its northern side was a couple of barrack-like accommodation with a front verandah. This was converted as the hostel accommodation for boys. The office of the Kerala Water Authority is presently located at this site. St. Mary's College accommodated the girl students. PWD rest house existed in the same premises as it does today.

The first year course in engineering and the pre-professional course for the next batch started simultaneously in the same year at this campus, in 1958. Those students of the first year class studied their pre-professional course in three different arts colleges during the previous year ie in 1957 — at Maharajas College, Emakulam, UC College, Aluva and Victoria College, Palakkad. Thus Thrissur engineering college physically and officially started functioning at Chembukkavu in the year 1958.

There is some misconception that the college was functioning in its formative years in the Maharajas Technological institute (MTI). As a matter of fact, this is heard even from many alumni of the college. The services of the MTI was, of course, utilized for the workshop practicals of the 1st year students. Similarly the services of Kerala Varma College was utilized for the physics and chemistry labs for pre-professional class.

Being a new college, the staff strength was very poor. Similar was the case of infrastructure. The principal and professor of Civil Engineering S. Rajaraman with the 'fresh from the college' Girija Vallabhan managed the civil engineering branch. Similarly Prof. M.P. Mathew and again 'a fresh from college' M R. Sreedharan Nair (MRS) managed the Mechanical branch. Both Girija Vallabhan and MRS were first rank holders of the previous year from Kerala university. Later, one Mr. Bhatt joined the Mechanical branch and Mr. Lakshmi Narayanan in civil branch. Professor VS Nair single-handedly managed the Electrical branch to start with.

It is more a simplistic statement that these many few stalwarts managed the whole show. They took the challenge with all their might and the college made a big leap academically the very first year of its inception. For us, in the pre-professional course Prof. Nambesan in Physics, Lecturer Kunhimoideen in Chemistry, Prof. P.L. Antony in English took charge of the respective discipline. But the problem was for the maths section. To start with, we didn't have any one in maths department. Then Mr. Pai, a fresh BA Honors, joined the faculty. Good in maths, simple and soft in demeanour, he struggled to keep the department going. It was then left to Ms. A.G. Theresa who joined the maths department at the far end of the academic year. Prof. Rajaraman taught us Solid Geometry. He was a Super Fast Express and we the students struggled to keep pace with him. Drawing boards along with the cupboards arrived in the middle of the course. They were placed in the verandah of the college and the drawing classes commenced soon after. There joined an elderly person W.J. Kuruvila in Civil Department as an Instructor. He was an expert in building construction and used to teach Building Construction and Estimating for Civil Branch. His presence was there at every construction site in the campus and outside. It is believed that he has much to do with the construction of buildings in Vimala College.

Girija Vallabhan was given the task of designing the college crest by the Principal. The result: a beautiful triangular crest was designed by him and came in to effect in the early part of the academic year. It is an outstanding piece of work and stands tall in its simplicity and serenity.

The college was allotted a bus by the technical education department. The bus was a typical KSRTC Bus, but painted green with the name of the college and the college crest beautifully printed on it. We were very proud of our bus. It was the second bus run by any educational institution in Thrissur, the first one being of the Veterinary college. The bus ferried us to the Ker-

ala Varma College and back for our physics and chemistry lab. Also, it took the first year students to their workshop practicals in MTI, subject to availability. Otherwise, the students just used to walk to the MTI.

The driver of the vehicle was one Madhavan. He was an ex-service man and hailed from Murkanikkara. Since I had some relations at Murkanikkara, he knew about me and got acquainted. Being a former armyman, he was an ultra disciplinarian. He sometimes used to complain to me about some students and their unruly behaviour in the bus.

There were floods in Thrissur and the surrounding areas during the monsoon of the 1962. The flood waters drowned the Chembukkavu-Cherur Road by about a foot. The Patturaikkal-Viyur Road also got inundated. It took two days for the water level to recede. The Viyyur bridge was severely damaged in the floods. The bridge was closed for all traffic and then opened for light vehicles after minor repair. Passengers coming by bus were transhipped at the bridge site. After a couple of weeks, bus traffic was restored over the bridge, but loaded trucks were not allowed for quite some period. It took a few decades to construct a new bridge at this site with standard traffic over it. In fact, the project work for the final year Civil students of third batch (1963/64) was the complete design of a new bridge at Viyyur. My memory tells me that the design was for a 60 ft. Span RCC rigid frame construction with standard loads. The designs and drawings were submitted to the state PWD for their necessary action. It is also a matter of pride that the survey camp for this batch was for the survey of the police camp at Ramavaramapuram. A detailed map including contours was prepared and a copy of the same submitted to all concerned authorities. I must also add that soil mechanics as a full-fledged subject in the final year was introduced for the first time by Kerala University for this batch.

The college enjoyed a place of pride in sports and games. The hockey team was the best in its class. Under the captain V.P. Abdullah, we consecutively won the inter-collegiate championships. The state team was studded with our players as far as hockey was concerned, to the extent that ten players in the field out of eleven were from GEC. Similarly the cricket team was also quite good, the best in the region. I first saw the net practice of the team at the PWD rest house premises. In those days, while screening movies in cinema theatres, a news reel was invariably screened in the beginning. There I had seen some national and international level cricket matches and used to wonder what this game was like. Finally when the college team started playing this game, I got quite fascinated. Though I did not play cricket I spent quite some time reading the news items and listening to commentary on cricket. Whenever the team went out of our campus to play, I used to join the group as part of cheerleaders.

We had a good sports personality in cricket in the pre-professional course — CK Bhaskar. He was a fast medium bowler and I have seen him in action in net practices. Midway through the course, he got admission in the pre-medical course and left the college. At one point of time, he was the best fast medium bowler the country had and even represented the country for a brief spell. He became a leading medical practitioner in sports related

medicine and ailments.

The proposed site for the permanent campus at Cherur for the Engineering College was quite familiar to me. During my high school days, one of my teachers and friend had requested me to give some coaching in maths to his younger brother. I used to catch the town bus at Kanimangalam that took me directly to Pallimoola. This was much cheaper and time saving. From Pallimoola, I used to walk towards the Viyyur Powerhouse junction. The thickly wooded land mass on to the left of 50 acre plus resemble a dense tropical rainforest. All varieties of trees ranging from teak, jack fruit, mango, tamarind etc. grew abundantly in this piece of land, which would have been a delight for the environmentalists of the present day. The land was two tiered. The top tier ie. on the Cherur side was thickly wooded where as the bottom tier that is on the Viyyur side was less thick. The metal road after running about 200 meters took a mild left turn, combined with a steep downward gradient and reached the flat area ie bottom tier. The remnants of this stretch of road can be seen even now. Thickly wooded forest like land on the left and the vast cultivating land of the central jail on the right with no living beings around — the walk from Pallimoola to Viyyur and back was quite a fearsome journey. The jail administrators cultivated paddy and other cash crops on their land. During monsoon months there used to be a regular flow of water from the jail compound, crossing the road by means of a make shift culvert and flowed like a small stream further south through the campus. The jail inmates were taken to task in the fields by their warden and were the only living beings to be seen around at times. My destination was an old building at the junction point where I meet my teacher and his younger brother. The building still stands there as a mute spectator. After the coaching class I would walk back to Pallimoola and catch the same town bus back in its next trip.

The town bus which I talked about was the first one of its kind introduced in Thrissur in the early fifties and ran from Kanimangalam to Ramavaramapuram. Later on the service was extended to Palakkad and further on to Ammadam keeping Ramavaramapuram as its final destination on the other end. The bus was owned by ABT Company of Tamil Nadu.

Cherur was a sleepy hamlet with docile populace at the Northeastern outskirts of the Thrissur Town closeted with villages Kuttumukku and Ramavaramapuram with Viyyur and Peringavu further away. The police camp, a school and the teachers training institute were the landmarks. The All India Radio established one of its stations in the early fifties and then came up a hostel of St. Mary's College which was later on converted to the famous Vimala College. It was great news for the people of Cherur and surrounding areas that a Govt. Engi-

neering college was coming up there.

The radio station had twin antenna. It was stated that this arrangement was to provide the transmission more on the north south direction and less on the east west direction. At one stage one of the antenna suffered a rotational twist. They approached the college asking them if they could help repair the defect. The civil batch students by surveying calculated the exact amount of rotation suffered by the antenna and left the rectification part of the work to the radio station.

The work on the permanent campus at Cherur was going on at a fast pace. There was not much extraneous considerations in the construction field in those days. Executive engineer PK Teresa was at the helm of affairs from the state PWD. The main building and three labs, Civil, Mechanical and Electrical came up post haste. Simultaneously two hostel buildings for boys with kitchen and dining halls, three professor's quarters, a few other quarters for lecturers and staff came up side by side. The architectural beauty of the structures was provided by none other than the famous architect JC Alexander. Vimala college gracefully accommodated the girl students. The college shifted to the new premises in the year 1960. The year also marked the beginning of five year integrated course for all the three branches.

The fine arts club became active on shifting the college to its permanent campus. Lecturer C.I Mathew of civil dept. headed the group. The college orchestra was literally terrorised by a few. Phalgunan and Babu Rajendran were the lead singers. Then there were Baburaj and two Rajendrans. Radhabai of the second batch contributed her share of songs. It was speculated that her song on the annual day, 'pyar kiya tho dame kya' from the famous movie Mughal-e-Azam provided the required strength for the love affair of CN Vijayan and Radhabai. Sadly enough, Vijayan is no more now.

The vast open space in the rear side of the main building was dotted with sports and games arena. Two basketball courts, one volleyball court, one tennis and badminton court were all vibrant spots of the institution. The hockey court had come up along with the main building. The space available on the western side of the hockey court was extensively utilised for net practicing for cricket. In the coming years, a bulldozer was put into operation to level the sloping ground between main building and hostel buildings to develop a football field, to be converted subsequently as a stadium for sports and games. The dream is yet to be fulfilled even after five decades plus. It was quite a pleasant experience to watch the students and staff engaged in sports and games of every hue off the class hours. It is painful that such pleasant scenes are totally missing these days in the campus.



The author was part of the 64 CE batch. He joined CPWD and was commissioned in General Reserve Engineer Force (GREF) where he served for 35 years





TECHNOLOGY IS NOT THE ANSWER

BHARATH RAVIKUMAR

There is a popular phrase from Abraham Maslow's *The Psychology of Science* - 'If all you have is a hammer everything looks like a nail' which is also known as the law of instrument.

As an engineering graduate, the only message I would like to give to all the students who are inching towards their degree is this - don't be a victim of the law of instrument. The motivation for this write-up emerges from the recent problems that have challenged our collective consciousness. The freshest one, which probably will still be going on when this article sees the light of the day - the killer smog which blanketed our national capital.

Apart from a lot of online forums which were discussing how to handle the situation, there were also several geeks who were talking about multiple niche and expensive technologies that can be installed to prevent a scenario like this in the future. Now, there lies the problem.

There is a tendency among the general public and also some budding technocrats that if there is a problem, that can be solved magically by some gadget or machine. That is as far from the truth as Pluto is from being a planet. Agreed, the constant

search and research in the field of science and technology was and is the result of human curiosity and the urge to solve the problems of humans. That has been the driving force behind our advancement from a wheel to a driverless car. But what if humans themselves are the root of the problem? By humans, I mean the psychology of humans which do not even give a penny about how their actions affect the things and nature surrounding us.

Human civilization should develop technology and not the other way around. The reason being that technology has no brain on its own and it will not move in a direction preferable to the whole ecosystem to which it is attached. Guidance is the keyword here. Guidance can only be given by a human entity.

Remember, no technology which does not work in tandem with the way universe works will not be sustainable. For example, the supply deficit of drinking water is amplifying day after day and this has led to the thought of squeezing out fresh water from the oceans.

Several processes like reverse osmosis, ionizers are being tried on a massive scale which are absolute non-sense. Just imagine why we are even thinking about getting water from oceans. It's because of the grave human negligence towards the existing sources of water which were already meant for us drink. So, is it worth the time

and effort to think about removing salt from oceans? Or should we just think about avoiding waste disposal in the freshwater bodies? Now if you ask what should be done to get rid of existing garbage in the water bodies, the answer is a question - Do we really need ultra-modern technology for such a trivial thing?

Coming back to the problem mentioned earlier, the smog in Delhi has been more of a policy and collective intelligence related issue than a technology one. If a robust public transport system and a better incentive package for the farmers preventing them from burning the stubbles are the actions to be taken from the side of the government; the tacit carpooling and stopping use of choolahs are the actions to be taken from the side of public.

Artificial rains and highly intense atmospheric carbon sequestration aren't the solutions here. These may reduce pollution at one place but at the same time lead to a greater environmental impact somewhere else. So, the solution here requires a thought process that should extend out of

the skill-set which we already possess. The reason being that these are all sets of wicked problems. Gone are those days, of staying in one silo of vocational discipline and searching for solutions inside that silo. As we rapidly

grow as a civilization, the problems that we face are also failing to understand the boundaries of disciplines set by us. We will have to play multiple roles in order to tackle these: as an engineer who can tighten a screw or two of a machine, a coder who knows

how to train a computer, an activist who needs to bring the real issues in front of the government, an orator who knows how to convey a message to a larger audience, an organiser who knows how to make a team work to minimize the impact and so on and so forth.

However, as we play these roles, it is also important to gain the skills and knowledge required to play. The wisdom to pick these things up are what we should be striving to gain from an academic institution or from our own workplace.

The points made here are in no way trying to discourage technological research

and deployment in areas which require intervention from the tech world: say, a mechanical substitute for humans in hazardous mines, and a robotic hand to improve the efficiency and accuracy of surgical procedures. Rather, these are meant to be reminders when we face moral dilemmas in our own domain. A reminder that we are more than just engineers.

Having said all this from the viewpoint of what we should do as change agents the onus is also on us to be responsible global citizens. As an idle mind is the playground of devil, the greedy mind is the playground of corruption. From the moment we develop an idea to solve a problem it is also our responsibility to see it is put into use in an efficient and fair manner.

No doubt that monetization of our idea has to be done in the most entrepreneurial fashion but it should not be at the cost of denying the people their dues. Setting up of an electrical vehicle manufacturing unit is a good idea but the product that comes out should not be just meant for the few elite on the top of the pyramid.

The profit of distributing it till the bottom is not to be measured just in financial terms but also in terms of making the life easier for everyone on the face of earth including ourselves.



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ENGINEERING, OUR LIFE JOURNEY

DIVYA VIJAYARAGHAVAN

What do the likes of Anil Kumble, Dr. Raghuram Rajan, Sudha Murty and Ratan Tata have in common? They all are engineers by training, who excelled and attained international stature in their chosen non-Engineering fields.

So, stepping back, more often than not, I have always wondered, what the 4-year course offers, other than the night outs and meltdowns, not to mention those 2 years of pre-university and the entrance coaching classes leading up to the course, which prepare us for the future.

The 4 years in campus undoubtedly are a lot of fun, be it the hostel life or the classroom life. The transformation over these 4 years, though seemingly gradual, results in the complete metamorphosis of a playful student to a responsible professional. This is conditioned by the rigour of the curriculum that involves several new courses, some to our liking and some not and new friends and teachers, many of who etch a permanent space for themselves in our hearts and minds.

Looking back, I still struggle to summon up the equations of Laplace series, thermodynamic laws and transducers from control systems or the complex programs from the Fortran courses. I can vouch that neither could a majority of us recall the learning from those college seminars, or the projects or the summer trainings. So, what stands out?

Validating the theory that the objective of education is learning and not teaching, most of the Engineers who I have met are very good self-learners thus proving that the course teaches one how to think and not what to think. In today's fast changing world, the real life professional jobs often demand a steep learning curve. To my mind, Engineers have been toughened enough in the course to take on to self-learning, and turn out to be fast learners.

Growth in career often throws up demanding situations in progressively expanding roles that require attributes such as high levels of prioritization, project management, performing in multidimensional environments and more importantly adopting a solution oriented approach. In any team with members from diverse academic backgrounds, in my experience, Engineering graduates tend to be more at ease with project management skills. They also tend to be natural organizers and time keepers, and hence merit strong preferences for managing roles - be it for people, sales, marketing or finance.

Complimenting the above, is an Engineer's hardened stress handling ability, cemented by humongous volume of assignments and tests, a much-needed trait to thrive in today's world. Engineers also come across as the best to rely on in demanding time-stressed deliverables.

The grind of the curriculum also hones up our analytical skills, much needed in today's business. To give an example, the ease with which people with Engineering background clear the coveted CFA (Chartered Financial Analyst) examination, considered as the mother of all certifications in Finance, a field totally unconnected to Engineering training, is a testimonial to this.

Life presents adverse situations every now and then. Tricky situations often demand smarter ways of working than mere hard work. Engineers are, by rule of thumb, adaptive and can flex themselves to the ground situations - be it in technology, management, public service; not to mention day to day life.

My take away from the B. Tech program is my ability to deal with surprises, ability to lead projects and teams through ambiguity and latticed work environments and project management skills.

In my opinion, what we earn at the end of 4 rigorous years is a degree, the intrinsic value of which is much more profound than what it appears to be and is a testament that the holder is a well-rounded individual with skill sets to succeed in today's modern world.



The author was part of the 95 EE batch and secured second rank for the course. She now works in the Middle-East

JAYANT KAMICHERIL

A few years ago, I was watching the Academy Awards ceremony on TV. Roberto Benigni was announced as the best actor for his role in *Life Is Beautiful*. After his trademark gauche tricks, like walking away from the stage instead of towards it, he finally received the Oscar. Then he started his acceptance speech.

"First, I must thank my parents for giving me the greatest gift of all," he said, then he paused for effect and dropped the bomb, "poverty." The glitterati was laughing, but I was hit by the sudden realization that he was dead serious.

I sat up, stunned. My son and daughter were born in India. My wife, Maria, and I moved to the United States when the children were 11 and 13. They were thrilled by the chance to come to the greatest country on earth. They grew up in a small town where the cultural highlight was watching a movie once a month in the palm-leaf-thatched cinema hall that leaked during monsoon, where toys or new dresses were a rarity given only on birthdays, and where the only tourist spots we visited were their grandparents' homes.



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Whenever we ask our children, whose five years of American life have been replete with Big Macs, Orlando trips, and 3-D video games, what their happiest moments have been, they go back to the humble times we had in India. They mention things like the four of us sharing one chocolate bar, catching fish at grandpa's pond, eating free rice soup at the church on Good Fridays, swinging in my old car tire. They bring up several other such paltry things, which my wife and I are trying hard to forget. But for Benigni, there was no forgetting. He seemed to be



thriving on it. Furthermore, he had the chutzpah to declare the enriching quality of penury to one of the wealthiest audiences in the world. And they laughed, totally missing his point. It reminded me of Mark Twain confessing in his old age, "All I did was tell the truth, and everyone laughed."

I once asked my mother, who, with my father, had struggled through financial difficulties and other hardships to bring up eight kids, whether she was happy in those days. She said they were so busy that she did not have the time for such a luxury as being unhappy or depressed. The little leisure time she and my father had, she said, was used playing Scrabble or going out on the beach and watching the soothing evening waves while the kids made sand castles till the last hues faded in the sky. Free but rich moments.

Recently on National Public Radio, during a discussion about happiness, a caller said we feel unhappy nowadays because there is a lot of pressure on us to be happy. It's like a commercial for a Caribbean cruise, insisting that is the only way you can experience paradise.

If I don't own Nike Air Jordans, I have no right to feel like a man. The same with shirts - has to be designer shirts if I am to be worth my salt. These are the times when I feel like going back to my village, where I don't have to wear a shirt or shoes and where a haircut costs 25 cents, which includes shaving the underarm, as it is done in our home courtyard. It's cutting-edge service minus the unnecessary technology.

During the past five years, for some strange reason, I became convinced that happiness comes from being rich like babies come from being pregnant. So, I have been impregnating myself with common symbols of wealth. Alas, I just kept getting overweight, but not at the right place. It was at this juncture that my son, Anand, who was reading Tao of Physics, came up with an observation a Chinese intellect made quite a while back - about 600 B.C. What he said woke me up from my temporary illusion of grandeur. I saw the light or at least a semblance of it. Here are his words:

"One who knows he has enough is rich." - Lao Tzu

'Mavinchodu' was the 'cool' place everybody hung out at in a time when entertainment was face to face and communication was mostly speech. It saw everything and heard everyone marked the attendances of many. This article is about that spot..

Sketch by Ravindranath B from 83 ME. He has spent more than 30 years in the food business and is based out of Vietnam with a Singapore-based company

MY EMOTIONS CAME HOME..

DILIP RADHAKRISHNAN

They say that the sea first goes far back, before in one tumultuous rush, it washes ashore as the unstoppable tsunami that breaks down every barrier erected in its path. Sitting around in a large circle on the green lawns under yellow lights after 30 years, my emotions had receded like the sea that night of December 3, 2010. My mind was rather numb when I tried to answer the question someone had posed: "Why are we here this night?"

We were there on those lawns, bound together by an invisible thread - we all agreed. While ice clinked in glasses and moths crashed on hurricane lamps, voices broke and emotions choked.

Raging tornadoes they were in their youth. Now cloaked in the calm of age and compo-

sure of maturity, they sat around and stood and spoke.

My mind went back thirty years when I had drifted away into my present world. I had never bookmarked a date because it was gradual and what is more - even I didn't know. The warmth of sentiments had cooled to the harsh cold of logic. Like a large serpent devouring a humble rabbit, my brain swallowed my heart.

What is it that brought us together there again? I had said that because our passion of friendship was great, that it still blazed like a fire in the wind even after thirty years. Had it been small, it would have died like a candle in the wind. But was that all?

The invisible thread we spoke of. The centripetal force that holds us

together. In that unique 'Mavinchodu gang' even when we had strayed away and neglected to nurture friendship - we are forgiven. Even whether we have climbed a mountain of gold or wallowed in a mess of our own making - we are loved. And above all, each of us was like a unique piece of a jigsaw puzzle that together weaved the magic carpet on which we flew together in the summer of our youth. High above this ordinary world. At heights that even the angels feared to tread. And secure in the knowledge that each of us has a place and no one else has a right to that place - in our collective hearts, in the garden of our minds.

And then it struck me as clear as a lightning strike on a dark night. After wandering over the deserts of time, my emotions had come home that night.



The author is from the 82 EE batch & founded Oiltech Engineering, which has a presence in 12 countries



LUCKY NUMBER THIRTEEN

P RAVINDRANATHAN

I got a degree in Engineering more than half-a-century ago in an age when computers and calculators were not even heard of and Google was not even conceived. We had no memory sticks or devices at that time. What we had, and still have, is our own built-in bio-computer with unlimited memory which sometimes gets lost or faded or blurred. I have tried to recall some of that blurred memory here.

My journey to become an engineer started unknowingly some sixty or more years ago on an ordinary day when a family relative and neighbour showed me a small model of a double story house made with cardboard with tiny furniture and even lights which could be switched on and off! I was fascinated and decided to make one of my own and ended up making a poor copy of the one with my neighbour. Thereafter, I forgot all about it.

Some time later, I completed the SSLC Examination with a First Class and joined the nearest UC College at Alwaye (Aluva now), about 10 miles away, as a day-scholar. Travancore University, as it then was, had decided to discontinue the 2-year 'Intermediate' and 2-year Degree courses and introduced the one-year Pre-University and 3-year Degree courses. So in 1956, I joined the very first batch of the new Pre-University course and passed with First Class. I was thinking of continuing as day-scholar and join the B.Sc. Degree course in the same college. I had no visions or dreams of becoming an engineer which would require me to go to the only Engineering College in the State at Trivandrum. If at all I got admission, it would involve a lot of expenses, which, I knew, my father would not be able to afford.

But my father, a retired clerk of the Paliam Estate Office, had a vision. He had learnt that a second Government Engineering College was being opened in Thrissur and more seats would be available. He had also learnt that there was a chance of getting a merit-cum-means scholarship for me from the Government (if I continued to get a First Class). He filled up the application forms, reminded me of the house model I had made and forgotten and told me to tell about it if any one asked me in interview why I wanted to go for engineering. I do not recall if any interview was there but I was selected.

With the introduction of Pre-university course, those who were selected for Engineering had to take a one-year Pre-Professional Course conducted by the Science Colleges followed by the regular 4-year Engineering Degree course. Thus, I joined the first batch of Pre-Professional Course, again as a day-scholar, in UC college and passed the Kerala (erstwhile Travancore) University examination held in March 1958 with First Class. I had opted for Thrissur college as it was nearer and, hopefully, less expensive. It was now time to leave behind my parents and



shift to Thrissur.

My father took me, along with a small steel trunk containing my clothes, to Thrissur a day before the reporting day. He had arranged for my temporary stay with a family, known to someone known to my father, till proper arrangements were made. Next day I formally joined the Engineering College at its temporary location in Chembukavu and was given the Registration No. of 90. We were informed that hostel accommodation would be available after a couple of weeks. The Engineering College office in Thrissur may have started functioning in 1957 but the first batch of students including me joined the college in 1958.

We were 120 students in the first batch, 60 in Civil and 30 each in Mechanical and Electrical. As the Syllabus was common for the first two years, we had common classes. There were two large class rooms. With 120 students it was not exactly an ideal situation. Worse, seated in alphabetical order, I found myself far away from the Black Board and lecturer, but there was no other option. It was in these rooms that we learnt the fundamentals of Civil, Mechanical and Electrical Engineering from Principal and Professor S. Rajaraman, Prof. M.P. Mathew and Prof. V.S Nair.

Apart from the two class rooms and rooms for the office and Principal, there were no other facilities. Drawing classes were held on the verandah. When it rained we used to hurriedly roll up the drawing sheets and move inside to avoid the sheets getting wet. For Chemistry practicals, we went to Keralavarma College. For Carpentry, Foundry and Smithy training, we went to the nearby Maharaja's Technical (later Technological) Institute (MTI) where we learnt to make mortice-and-tenon joints, sand moulds for casting and iron chisels (I was expelled on the first day from smithy workshop for not wearing footwear) and later worked on lathe machines. We surveyed the roads of Chembu-

kavu umpteen times using chains, ranging rods, arrows, cross staff (are these still in use?), Plane Table, Compass etc. Meanwhile, I got a seat in the hostel which had 3 halls with about 30 beds. The hostel was just in front of the College, just across the road where the Google map now shows Dept of Registration. I think there was no other hostel that year. It was perhaps some old Govt Office. In 59-60, I was in another hostel which was on the right side of the College where the PWD rest house is now located. The other hostel was perhaps given to the new batch.

I also was granted a merit-cum-means scholarship.

Towards the end of first year, we were given the Hall Tickets with Register Numbers for the coming University examination. My Register No. was 436. Someone casually observed that it was an unlucky number as the digits added up to 13.

At a function in the College, the Principal of College of Engineering, Trivandrum who was the Chief Guest, hoped that in spite of the lack of adequate facilities, the very first batch of the college, would do well. Having got a first class in the last 3 years, I was hoping to get the same in the first year examination also. When I checked the results published in the newspaper, I was shocked not to see the number 436 under 'First Class' and not even under 'Second Class'.

Not getting a First Class would almost have shattered my father's vision as my scholarship would have stopped. I broke down and was on the verge of collapse when someone pointed out just two numbers printed above 'First Class' and below 'First Class with Distinction'. Both were from our college and one was 436! I could not believe that I was either first or second in the entire University.

The new College did better than what the Chief Guest had hoped. We bagged the two top positions in

the university. I learnt later that I lost the top rank to my good friend T.S Balagopal by just one mark! Unlucky 13.

That was a turning point. I realised that if I lost the top rank by just a mark, maybe I could get it the next year. The second year started with we as 'seniors' as the second batch of students joined the college. One more year we spent surveying the roads of Chembukavu and visiting the workshop of MTI and learning Thermodynamics from Prof. M.P. Mathew and electric motors from Prof. V.S. Nair and at the end of the year I managed to get the First Rank, perhaps due to the change in Register No. to 417!

The third year started in 1960 with the three branches separated. We left Chembukavu and moved to the present campus. Only the main building and one hostel block were ready. Laboratory buildings were still under construction or equipments were being installed. We had to go to Trivandrum to use their hydraulic lab for our classes. Instead of roads of Chembukavu, we surveyed roads of Ramavarmapuram. We learnt about roads and railways, and docks and harbours and Arthur Morley's Theory of Structures. At the end of the year I could still retain my ranking.

The next year saw the college filled to capacity. Being the last year for us we were all trying to do our best. We spent days in surveying and laying out curves and nights in observing stars, trying to determine the Latitude and Longitude of our College. We learnt to do complex and complicated calculations using 7-figure log tables. At the end of the year, the unlucky 13 came to haunt me with a new Register No. 319. The final examination was to be held in March 1962. A farewell party to the seniors (us) was scheduled in February on a day on which another kind of party was also scheduled by 8 planets of the universe, the 'Ashtagraha Yoga' (conjunction of 8 planets). Astrologers all over the country had been predicting all sorts of disaster to follow the event. If that was a very rare event, our party was the rarest. The college will never again see in its life time another farewell party to its first batch.

The farewell party went off well. The only thing that I remember about the party was the applause received at the end of the reply-speech on our behalf given by Sreedharan Nair. At the end of the party everybody seemed to have lost something or other.

Fortunately for me, the unlucky 13 didn't stand in my way and I could retain my position. A provisional certificate was issued on 29.6.1962 by the University certifying that I have passed the examination. The formal certificate that I have been "admitted to the Degree of Bachelor of Science (Engineering)" was handed over during the convocation held in November 1962.

Thus my father's vision and dream were fulfilled and I became an Engineer. In July 1962 I joined the College as Assistant Lecturer and in November as Lecturer, perhaps the first alumnus to join the College.



The author was part of the first ever GECT batch & also worked in the college as a lecturer. He served in the CPWD for 38 years

DECEPTIVE NOSTALGIC EUPHORIA

SREYUS PALLIYANI

I love her but I don't like her. We had been married for nearly 2 years. Ours was one of those impulse love stories when you just know that you have to marry that person when you see them. And we were as impulsive as we were young. Our youth didn't obstruct our passionate romance.

We were engaged, we were married. We were inseparable. But then.....

But then began the tiny things..... The incidents themselves were not isolated. At first, I would ignore them to be the rambles of an immature young girl. But then, it would not assuage over time.

The first time I lost it was when I bought that expensive shirt. I nearly threw a tenth of my salary down the drain that day. I felt guilty even wearing it. But the silk and my skin felt so good and not to complement myself, I did look strapping. I couldn't hold my excitement as I wanted her to behold the majestic view as well.

I exhibited myself to my better half accessorizing my best smile.

"What do you think?" I asked expecting her to praise me to the clouds.

"It looks amazing on you!" she replied. I smiled humbly inciting that I had nothing to do with my good looks, but it was all God.

But my smile was ephemeral.

She followed up her complement with, "You look just my daddy now. The colour matches your eyes!"

Although I realized that she was not mocking me, and that her excitement was for genuine appreciation of her dad's style and my close encounter with it, it annoyed me deeply.

"I don't want to seem like your old man!" That was the last I saw of the garment.

Come to think of it, I still hate that shirt and her words executed at an earlier time would have saved me a lot of money.

The next incident was a few months later when I got my haircut. It was supposed to be one of those hipster cuts that the college kids were donning those days. The barber even said I looked dashing and, so I tipped him a little extra.

I went straight home to show my love, well my wife, the mane.

"Oh babe," she began as I twinkled, "Wow! Just wow! I love it! You look just like my brother. He just got the cut last week when he came home for the holidays."

Needless to say, I trimmed my hair the next day.

Her antiquities were overwhelming me. And not pleasantly.

Perhaps it was my childishness too, but my wife was beginning to annoy me.

We began having frequent fights. Sometimes they would last a day, sometimes a week. But despite everything, we continued to stay with each other.

I had been increasingly affected by similar feelings for a while. Some days it would reach the point where I would open my bag and get ready to pack my things and leave. I would stop. Not because I realized that I possibly couldn't leave my own house, but a single feeling of deceptive nostalgic euphoria would tie me down with a smile.

But that particular morning, was different.

It marked our anniversary and as part of the occasion, I wanted to do something out of the ordinary. Granted we had our problems, and we were sure that we would split up soon, but the both of us still remained.

I had decided to shave off my 1-year old beard. It was a hard decision, but I decided to welcome the change.

I had walked over to surprise her while she diced vegetables in the kitchen.

She let out a slight scream on first sight as she covered her mouth with her hands. Slowly, she began to feel my hairless chin with the innocent giggle of a child that always made my heart skip a beat.

"You kind of look like my uncle now," she said cheerfully.

Contrary to her feelings, it pissed me off and my heart rate elevated again.

"I always have to look like someone, don't I?" I shouted back.

"Why can't you ever see me for who I am? Sometimes I have to look like your brother, sometimes your uncle, sometimes your dad..... why can't you see me as your husband for a change? God!"

She did not say a word but began her never ending sobs.

I walked out of the room unaware of my unwarranted outburst's impact.

I packed my bags justifying my actions with her wrongs from the past. As I had everything put away in my suitcase, I picked it up, ready to leave. I walked down the stairs and made my way to the main door.

She called my name.

I turned around to look at her face, all red now from the tears.

"Why did you even marry me?" I asked tired.

She paused before she replied, "Maybe I married you because you never had a stranger's face....."



The author was part of the 13 CE batch & secured fifth rank. He published his first book, a thriller novel, in 2016

DEATH OF A REVOLUTION

VISHNU PRASAD

You need petrol, I told myself.

It was around 11pm and I had a couple more hours to spend in the office. My mind zoned back to that thin black needle on my yellow scooter that had stealthily crept onto the red line, indicating there was nothing but air in the fuel tank. I had just about enough to get back home, I calculated. But get petrol, I told myself. Why leave anything to chance?

I sat staring blankly at my computer for half an hour when something that I saw or read — I don't remember what — triggered that pesky hormone inside your head that takes you back in time. This time, this biological time machine took me back to college, when I was a crazy hot-headed teenager, marching and shouting in the middle of one of those political rallies, declaring war against whoever dared to take me on.

I had been a member of the Student's Federation of India during the four years that I spent in college, though my interest had waned in the final two. But on that warm humid night, a full six years after my college had sent me out to face the world all by myself, all those slogans came back to me, a voice leading a hundred others, all of them existing simultaneously inside me, to the rhythm of my beating heart.

Let the white flag fly high, and as you watch it, let the blood inside you boil...

I marvelled at the life that those lines oozed, more than what a lot of people would ever be possessed with. Oh! The romantic notion of a generation that went to war with poetry on their lips! It was then that I realised why the great kings of history kept on needlessly expanding their empires. Soldiers needed battles to fight. There was nothing more frustrating than being in a peacetime army.

Let a stream of blood colour the sand

red, let a thousand such streams form a river...

More and more of those unrealistically glorious battle cries came rushing back to me as I prepared to wrap up the day. It was then that a colleague of mine came and asked me if I could drop him home. The protest march, going on inside me, was only half-way through when we started on my scooter, him sitting behind, listening to my stories of how we used to spew poetry in anger. I painstakingly translated each line into English, though I am not sure how much of it, he processed or even heard, for the wind was stealing half the words from my monologue.

Let a thousand rivers form a sea, and at the raging sea, let hunting dogs bark...

My colleague safely home, I found myself all alone with an equally lonely road in front of me. I had resisted the urge to go back fully in time for hours. The warm breeze, always tempting me into things that I shouldn't do, whispered in my ear to forget myself. A lot of people still blame the snake for Eve eating the apple, but I have my suspicions that it was the breeze. I am yet to come across anything more persuasive.

All of a sudden, I was no longer on a scooter. I was on a road that I had strode on once, surrounded by trees and buildings who knew me once, flanked by faces, a lot of whom I no longer remembered, but in whose presence, I felt like I had suddenly recaptured a lot of what I had lost. I was younger, thinner and stupider. For reasons that I could not fathom, I was angry, and my anger spilled over from my veins and spread

out in a thin film under my skin, causing it to burn. I shouted myself hoarse, warning everyone that I was coming — that rich landlord that had made life insufferable for every soul who had fallen under his shadow a century ago, every American president since the Second World War, a crooked ruler who had broken the bones though not spir-

its of comrades decades before I was born, oppressors in far-away countries that I was never going to set foot in, oppressors in nearby classrooms, parents who had shackled their children with leftover dreams from their youth and God, who crafted men in His image and borrowed inspiration for the world around Him from His worst nightmares. I was coming for all of them.

I shouted the slogans of my youth at the top of my voice, as the wind goaded me and my comrades on.

Let our enemies fire at us mercilessly, but no, there shall not be a step backward...

All of a sudden, my scooter spluttered and coughed like an old man dying of tuberculosis in his final few minutes. After a few dying gasps of air, it came to a standstill. I took a minute to come back into the present, where I was alone again, the darkness of the night and a lonely road for company. Even the breeze, its mischief now done, had forsaken me.

The revolution had died an abrupt death.



Illustration by Dipti Kamath, 2012 CE



FIVE YEARS OF BEATITUDE

NANDAKISHORE VARMA

In 2003, I came back to the Government Engineering College, Thrissur – my alma mater – after a gap of eighteen years to take part in the programme “Alcheme 2003” organised by the Chemical Engineering Department. As I entered the hallowed portals, I was accompanied by the sobering thought that many of the students would not have been born when I passed out in 1985. I was about to meet the next generation.



The author is from the 85 CHE batch. He has worked for various companies in India and the Middle-East and is presently a safety consultant

There was a long line of alumni present, right from the first batch after the inception of Chemical Engineering in the college in 1967 – my previous generation! So in fact, it was a meeting of three generations. The day was spent on stage programmes where the youngsters dazzled us with their talents, interspersed with a sumptuous lunch. Then, after tea, was the main focus of the programme: the interaction between the alumni and the students.

During the interaction, one thing became abundantly clear – the kids wanted to know only about job and business opportunities. If I remember correctly, there was only one question about pollution; none about safety or the pitfalls of industrialisation. This was a huge departure from my college days when the so-

cial aspects of engineering dominated the discourse.

When I remarked on it after the meeting, the professors said: the students are like that nowadays. They are intent on their studies. Nobody is much interested in extracurricular activities. Most of them find placement through campus interviews by the time they are in the sixth semester; then it's all about building a career. Even the college union election has become an empty ritual without the fireworks of yesteryears.

I was happy in a sense to hear this – it seemed that the future of technical education was safe. Our college was churning out a bunch of focussed and motivated youth every year to build the India of the future. But somewhere something rankled – whatever happened to our idealistic youth? During our college days, most of us considered ourselves the foot soldiers of an army fighting for a better tomorrow. Today, the young ones were seeing only their lives ahead.

After lunch, I wandered through the corridors (much improved from my college days!) of the institution, searching out the lanes of memory for that bright-eyed youth who entered these gates in 1980, with a head full of ideals and a heart full of dreams. I couldn't find him. From the windowpanes, the bleary-eyed, cynical middle-aged man that I saw every morning in the shaving mirror stared back at me.

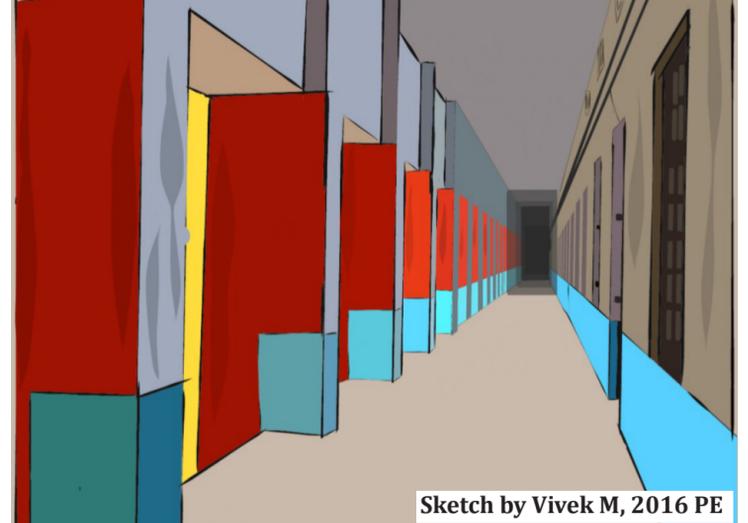
Fourteen long years have passed since that day. Engineering has lost much of its sheen due to the proliferation of colleges and global recession. Unemployment is a stark reality. In this scenario, I couldn't help wondering – have our budding engineers started thinking beyond their equations on a page?

In this context, I took a long, hard look at the five years (four officially, stretched out due to course lagging) I spent in this institution. I realised something with what amounted to a shock – engineering was only a very small part of what I learnt during my five years here. There were many things, much more important, which made me what I am today.

It was here, in the hallowed halls of my alma mater, that I learned to read seriously; to disseminate ideas; to form opinions about society and the universe in general. It was here that I learned to write, at first hesitatingly and then with growing confidence. It was here that I first learned to appreciate movies, drama and good literature. It was here that I learned to love.

It was a wide-eyed boy, innocent of the world and its ways, who came in – but it was a man with firm convictions about life and society who left five years later. And I have my college to thank for that.

I believe the current doldrums is a temporary phase. Man's march towards civilisation is inextricably linked with engineering – we have been leading ever since that unknown primitive genius discovered the wheel. And we should continue to lead, keeping the benefit of mankind as our only



Sketch by Vivek M, 2016 PE

aim – and not fat pockets.

In the 1983-84 issue of the college magazine which I edited, I had shared the following quote from Albert Einstein from his address to the California Institute of Technology:

“It is not enough that you should understand about applied science in order that your work may increase man's blessings.

Concern for man himself and his fate must always form the chief interest of all technical endeavours... in order that the creations of our mind shall be a blessing and not a curse to mankind. Never forget this in the midst of your diagrams and your equations.”

Golden words, which every engineer should keep in mind.

A TRIBUTE TO THE NSS OF EARLY 80'S

Dr. R. P. R. NAIR

WHAT WERE VERY SPECIAL ABOUT THE NSS UNIT OF OUR COLLEGE DURING THE PERIOD AROUND 1980-84? ABLE LEADERSHIP, COMMITTED VOLUNTEERS AND NOVELTY IN PROGRAMMES. WHO WAS THE LEADER AND WHO WERE THE FOLLOWERS? PROF. K.J. PAUL (PROF. DEPT. OF MECHANICAL ENGG.) AND OUR DEAR STUDENTS. WHAT WERE THE NOVELTIES? THE PROGRAMMES WERE OF A WIDER RANGE COVERING TECHNO-SOCIAL AND CULTURAL OUT REACH TO THE GENERAL POPULATION.

PROF. PAUL HAD MADE IT ALMOST MANDATORY THAT ONE FACULTY MEMBER WITH FAMILY SHOULD STAY SHOULD STAY IN A CAMP FOR A FULL DAY. THIS HAD GIVEN A HOMELY TOUCH TO THE CAMP SITE. THE ASSISTANCE IN STUDIES EXTENDED TO THE ACADEMICALLY CHALLENGED STUDENTS OF THE LOCAL GOVERNMENT SCHOOL WAS YET ANOTHER NOVEL VENTURE. IT WAS AN EMPHATIC REMINDER OF THE RESPONSIBILITY OF THE PRIVILEGED PERSONAL OF HIGHER EDUCATION TOWARDS THE NEEDY, MUCH WANTED AND NEGLECTED CLASS OF OUR SOCIETY.

IN ALL ACTIVITIES, STUDENTS WERE AT LIBERTY TO BE FREE, FRANK AND FEARLESS TO EXPRESS THEIR VIEWS. THE MAGNANIMOUS LEADER

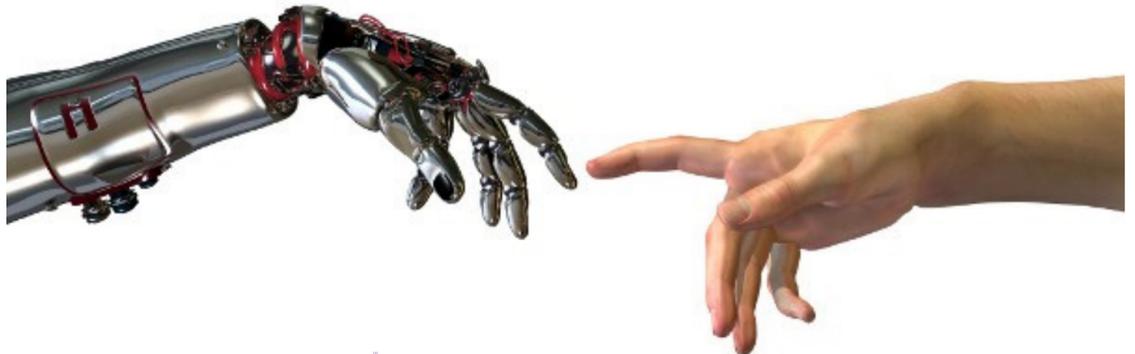
AT THE RECEIVING END ALWAYS HAD ACCEPTED THEIR OPINIONS WITH HUMOUR AND AN ENDEARING HEART CAMOUFLAGED IN A SOBER EXPRESSION OUTWARD. THIS HAD AUGMENTED THE CHANNELISING OF THE RELENTLESS ENERGY OF OUR STUDENTS TOWARDS SOCIAL TRANSFORMATION.

I AM THANKFUL TO THE NSS FAMILY FOR ACCEPTING ME AS ONE AMONG THEM AND THEIR CONTINUED PATRONAGE. PROF. PAUL – DEAR PAUL SIR IS NO MORE. THE THOUGHTS OF HIM ARE STILL FRESH IN OUR MINDS AND SHALL REMAIN FOR EVER. REMAIN SO FOREVER. BE EVERGREEN



The author, known as RPR among students of GECT and many other colleges in Kerala, was a faculty in CE dept from 1966 to 1998. His area of expertise is in Structural Engg. He is also a sports enthusiast.

IS A TECHNOLOGICAL SINGULARITY IN THE OFFING?



SANTOSH C KURUP

Renjith was a driver for the rental car agency that we contracted for our transport services. Renjith has not passed matriculation, lives with the 'yellow' ration card (BPL card) and comes from the socially backward community. He didn't have any special dreams, except to sleep whenever time permitted! He lived a completely ordinary life and was a classic example of marginalised lives of our country.

Three things changed Renjith's life completely. A significant one was the understanding of financial aspects involved in taxi rental vs taxi ownership, which led Renjith to buy a car and be the driver himself, providing same services to the company where he worked earlier. The other two were Jio launch and demonetization. Jio launch enabled Renjith to shift from feature phone to smart phone. He spent quite a lot of his time learning the nuances of Internet and Android apps. While his early day romance was on YouTube videos and music apps, demonetization forced him look for alternate means of managing his money. With the help of his technology friends, he opened the Internet banking facility and connected it to UPI mode of mobile payments. Renjith also became aware of taxi aggregator Uber and took the licence there. As I write down this, Renjith work for a company during the working days and work as Uber provider during weekends. He knows the value of time and importance of user ratings for getting more calls from Uber apps. He also uses Amazon and flipkarts for small purchases (he believes that high-value purchases should still be made by going to the shop due to the risks involved!)

With technology, Renjith moved into the mainstream and he is a confident entrepreneur who can handle technology with ease and use it for his benefits.

My mother had a request last year, to change her old feature phone with another one. Her only request was to buy the phone with large buttons and one button dialling, so that she can call us easily. As an experiment, we bought her a smartphone. My little daughter explained each of the new features to her; installed WhatsApp and showed its usage. A few days later, she calls and asks for getting it replaced with the old phone itself, as it was becoming very difficult for her to remember all the features. We persevered for a week more; in the meantime we enabled her data connection and our daughters started sending her photos and videos of their school day and other functions. She is now thrilled with the photo and video sharing app! She can also check the balance in her bank. We want to enable her to make all payments through online one day. A homemaker, who never used

technology before, is enjoying the newly obtained freedom of seeing the world around, at her fingertips.

The above instances show how technology has enabled two ordinary individuals to experience life differently, that too being completely naive to technology.

I feel very lucky to have born at a time where we could experience the structured and slow-paced world of the past to a very active, completely connected world of the present. I loved the past, as it gave us a lot of time for personal connects. We were fine to wait for 10 days for a letter to go and return with a reply. We took a lot of time to travel to even nearby places, but in the process, we got acquainted with a lot of people. Every picture we took were based on our intuition that it would turn good, and waiting to see the actual developed photo a few days afterward! Having said that, the connected world of now is equally exciting.

I remember standing behind and peeping through the shoulders of my 'buiji' friends to take a look at the Computer that was decked up in the computer lab of GECT Thrissur. Thanks to our dear teachers Santhosh Sir and Sadhique Sir, who exposed us to the computers and it's functioning. We were the lucky few in the non-computer science branch, who could work fairly well on the PC due to the support of our teachers - It is so ironic that I ended up being a professional in the IT industry and had the opportunity to work extensively with computers and IT Systems.

For a large period from its inception, Information Technology (IT) remained in the academic world, acting as a tool to support advanced mathematical simulations. In business, IT was a support function or a cost centre department. It was used in processing the internal accounting, HR or procurement activity. In the last decade, for businesses, for common public and governments, IT has emerged as an enabler in making lives better. The story of Renjith is not an isolated one in the current world. We see every discipline getting benefitted by the advent of technology. A small but beautiful innovation in the name of 'Nano Ganesh' has helped nearly 400,000 farmers in Maharashtra to irrigate their farmlands remotely, using IOT and GSM phones. The new generation Youtubers achieve fame through online video channels. Facebook is not just a social sharing platform - it brings the authoring power to every individual. Most of the alumni networks are connected through WhatsApp helping to rekindle their erstwhile lost friendships; Smule brought a lot of hidden talents to the main stage... the list can go on!

The future of technology looks even more interesting. Fourth Industrial Revolution will

disrupt every field of Engineering using technology. If the current IT is driven by human intelligence, the future will belong to machine administered intelligence! The current paradigms of programming, to set rules for machines will give way to the setting of input data context and allowing the machines to learn and build its own rules. The outcome of such paradigms is unimaginable! IBM Watson is one such case, which claims near accurate diagnosis for commonly occurring human ailments. While the experience of a professional is built over 40 – 45 years of their career in the respective field, machine intelligence can learn from the experience for multiple generations, and keep its memory intact. So a single machine can accumulate many generations of knowledge and can seamlessly share and learn between itself! In another development, Self-healing machines are already being tested successfully by Boeing in their aircrafts; self-driven vehicles can change the transportation sector to a new level – even though commercial transport may take more time, it has huge potential in Airports, farmlands, factories, large installations and theme parks.

We are required to adapt to new order much faster than in the past. Jobs can shrink and rapidly evolve. Students will need to take advantage of the vast knowledge base they have access to and create newer opportunities for themselves. Self-motivation will be the biggest differentiator in this highly competitive world. Institutions should reimagine themselves, as learning centres and less of teaching centres! Teachers should become mentors and focus on applications of Engineering. With more than 60% of the population still at the bottom of the pyramid, our country needs more frugal solutions for a lot of social problems and educational institutions can drive such solution discovery.

Technology if not used responsibly, can be harmful and can leave an irreversible negative impact on humans and our planet. Teachers and educational institutions should play a key role in grooming students as responsible users of

technology. There is always this million-dollar question on whether the machines will overtake humans! With the exponential rise in machine intelligence, it may so happen that machines of future may seriously challenge the intellectual capabilities of humans. However, human emotions are much more complex; our values and virtues are evolved through unstructured knowledge algorithms that are very unlikely to be cracked. In that future point in time of 'Technical Singularity' as described by the experts, humans may unravel the mysteries and secrets behind life & death!



The author is from the 94 EE batch. He is currently the CEO of the ICT Academy of Kerala

