TIRESIA

Colors of Malaviya

THE INSPIRING LUMINARY

MAHAMANA PT. MADAN MOHAN MALAVIYA

Editor-in-chief

Dr. Arjun Dubey

Faculty Members

Dr. R.K. Shukla

Dr. B.K. Pandey

Dr. P.P. Pande

Prof. M.K. Srivastava

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Message from The Editorial Board

"The act of taking the first step is what separates the winners from losers."

"Well begun is half done", so goes the befitting adage to the institution that gears up to bask in the exalted light of a university. As the monsoon showers sing prelude to the commencement of this academic year, the institution cordially welcomes its fresh batch of Malaviyans. In the midst of this revitalizing replenishment, **The Editorial Board** issues this edition of **Tiresia** with full zeal and vigour.

As we start off with the session, **The Editorial Board** is all set to bring its first event 'Malaviyan Ace' and the preparation for thrilling 'techSRIJAN' has accelerated.

FROM VICE CHANCELLOR'S DESK

I am pleased to note that the fourth issue of University's monthly newsletter titled **Tiresia** is being released in Aug 2014 by the Student Activity Centre of the University. This issue of the newsletter shall include the updates and information regarding the initiatives taken for positive change in the transformation of erstwhile M.M.M. Engineering College into M.M.M. University of Technology as the first residential technological University of Uttar Pradesh. Since the University is reconstitution of M.M.M. Engineering College so it has inherited a legacy of Malaviyans since 1962.

I understand that this emergence of the University would have not been possible without the goodwill, remarkable professional service to the society, accomplishments, support and brand created by the past students, teachers and staff members apart from various other reasons.

I am confident that such monthly newsletters will act as a reporter for the tale of University activities and achievements on academic fronts and other endeavors in providing quality technical education & enhancing the employability and placement activities of the students, accomplishments of the teachers and staff members on monthly basis. Such newsletters should not only be informative in nature but also be persuasive in focusing on displaying the multifarious activities of curricular and extra-curricular nature, the awards and achievements of the students, teachers and staff, the training services and the career being offered to the students and the alumni interaction.

I extend my best wishes to all the members of **The Editorial Board** and believe that

this newsletter shall act as potential communication link amongst all stakeholders inside and outside the University for dissemination of information about good practices and seeking feedback for improving the academic environment of the University for achieving the excellence in technical education.

Prof. Onkar Singh

FROM CHIEF EDITOR'S PEN

I feel extremely delighted to share with the readers release of the fourth issue of monthly news letter in Aug 2014, at our university portal in the shade of a young, experienced, dynamic, visionary and scholarly vice-chancellor Prof. Onkar Singh. Of course, we have been bringing out the same under the aegis of erstwhile M.M.M. Engineering College, Gorakhpur dating back to April 2010,yet the specialty of the present issue is that it, besides providing the readers with the details of information and activities of in and around the university, speaks a volume about the destiny of the university. The student members of **The Editorial Board** deserve

appreciation in carrying on "the old order changeth yielding place to new" with doubly increased energy and enthusiasm.

Dr. Arjun Dubey

Tête-à-tête

with Er. B.L.Gupta

Er. B.L.Gupta, a Civil Engineer from the 1971 batch of Malaviya, is one of those few people who, in spite of having reached commanding heights are still modest and down to earth. He retired as a Superintending Engineer at the Irrigation Department. The Editorial Board had the privilege to interview him, where he openly shared with us his vision. Here is an excerpt from what he had to say:

Q1: How would you describe your life post Malaviya?

After Malaviya, we did not have many options. Those days, for Civil, Electrical, or Mechanical engineering graduates, government job was the first and last target. We did not have any counselling or job oriented guidance within campus. During final exams we had applied for government jobs in PWD/ID/Jal Nigam (then LSGED), through UPPSC. It will not be out of place to mention that till 1969, immediate job was almost guaranteed for fresh engineering graduates of all branches. When my batch passed out in August 1971, a shadow of unemployment was looming over the engineers from previous two years. But by June 1972, large no. of vacancies were declared and all got absorbed on ad-hoc basis and later regularized.

When I joined UPID, with only 5 batches having passed out before mine, no Malaviyan was at a senior position in my department. There was a visible fear of doubt on faces of senior officers, mostly products of RU, AMU, and a few from BHU and IIT-(KDP), regarding our performance. But as the time passed, with our hard work and dedication, Malaviyans gradually proved their talent, utility and fitness.

Q2: How do you think will the university status benefit our college and what are the challenges to it?

I have no idea about the present branches and job scenario regarding each of them. I think PSUs have very little jobs to offer right now and only private sector can absorb the new engineering graduates. Only the quality of training and the resultant output of the Malaviyans at the job front shall decide the name and fame of MMMUT. But it will take some time.

Q3: Sir, tell us something about the scholarship scheme in the honour of your late father and the inspiration behind it?

Since few years ago, I have been thinking of paying back the social debt on me, which I received as merit scholarships for 14 years during the 19 years of my education. The amount worked out to be Rs. 10740/- received between 1957 and 1971. If price rise indexing is done, it amount to several lakhs now. Since it was not feasible to pay such a big sum in one go, I discussed this issue with VC sir, and proposed to pay Rs. 2000/- per month from my pension till I am alive, and he agreed to it. I will deposit some additional fund so that if I expire in mid of session, the beneficiary student does not suffer but get amount up to the end of that session.

Q4: From your humble origins you have reached to the esteemed position of Superintending Engineer at Irrigation Department. What would you say is the secret of your success?

There is no secret. In government jobs everyone reaches such heights unless he is involved in some very undesirable activity and trapped. Position in merit list of your selection plays a very important role.

Q5: What message would you like to convey to the inquisitive students of Malaviya?

My message is neither technical nor professional, but based on my personal experiences and some hard facts of human life instead-
i) Saving: Start saving from very first salary you get. Initially, invest in some assured return with zero risk schemes. Draw a clear line between your present plus future needs and luxury. The early saving shall become a sum, huge enough, to meet your needs later.

ii) Physical fitness: If you are physically not well, you will not be able to enjoy your work, and hard earned wealth and even your family life. Later years, if not earlier, of student life is the best time for starting regular workouts. I will say, Yoga is the only solution to all your physical and emotional problems which may crop up in your future life.

"Hardships often prepare ordinary people for an extraordinary destiny"

Campus News

- The first University entrance examination for admissions in B.Tech., MBA, MCA and Ph.D was successfully conducted on 20th of May this year.

- With the commencement of academic session 2014-15, the students registered themselves for the odd semester. Orientation ceremony for the newly admitted students took place on 21st of July'14.

- In accordance with the new syllabus issued by the University for the first year, the first Minor Test will be conducted on 25th of August'14.

- The University has started **Battery operated Rickshaw** service for all, charging nominal fare of Rs 5 per person, with a motive of lush green and pollution free campus.

- The University Cafeteria has been re-opened with an intention of providing the Malaviyans with meals at reasonable rates.

- A MOU to launch a scholarship scheme in the name of late father of our alumnus Er. B.L. Gupta has been signed, according to which the beneficiary student will be awarded with a sum of Rs.2000 per month.

Youth Activism

STUDENT MEMBERS

FINAL YEAR

Abhay Maurya

Asad Khalid

Garima Singh

Harshita Srivastava

Nitin Mishra

Priya Singh

Rajshree Mishra

Resham Tyagi

Shikhar Srivastava

Shivam Sinha

Tushar Srivastava

Utkarsh Tripathi

Materialistic, technology-dependent, ill-mannered and out-spoken, this is the general perception that everyone has towards the present young generation. Their perception may be correct to some extent, but since 'every coin has two sides', the other side describes this so called 'wicked lot' as equally bold and purposeful.

Youth Activism is the involvement of youth in community organization for bringing up a 'social change', which is mostly issue-oriented. This includes several non-violent protests against crime, corruption, government policies, etc. Now-a-days these technologically aware youngsters are taking help of the social-networking platform to communicate about various issues.

Teens are often discouraged to participate in politics because the adults dominate this 'discourse', but the fact is that even the youth can advocate a change and may even become the major reason for 'the change'. Many small instances collectively touched our nerve, for example the 'Jessica Lal Murder Case' boiled our blood and eventually the brutal "Nirbhaya Rape Case' resulted in huge uproar causing an outburst of emotions. As a result, the topsy-turvy system was brought back to track to a little extent, which may be seen as a small but a prominent victory of the 'Young India'.

After 67 years of independence, the condition of our country is still critical but there is a ray of hope from the youngsters to bring about a positive transformation in our country by their perseverance. This young generation has brought a lot of changes and has a potential to bring many more. The great social worker Mother Teresa once quoted,

   "Do not wait for leaders, do it alone from person to person!"

No more queues on the World Wide Web!!

Here is something to cheer about for those who chew their finger nails out of impatience while they happen to surf on the net. In bid to achieve better speed for data transmission, Electrical Engineering and Computer Science (EECS) faculty members at MIT namely Hari Balakrishnan and Devavrat Shah with EECS graduate students Amy Ousterhout and Jonathan Perry, and Hans Fugal of Facebook have devised a new system to reduce delay time in data centre queues. **Fastpass** as it has been christened has experimentally reduced the average queue length on Facebook by a whopping 99.6 per cent.

Big websites usually maintain their own data centres, banks of tens or even hundreds of thousands of servers, all passing data back and forth to field users requests. Like any big, decentralized network, data centres are prone to congestion: Packets of data arriving at the same router at the same time are put in a queue, and if the queues get too long the packets get delayed. Like the Internet, most data centres use decentralized communication protocols. Decentralized protocols have the advantage of an ability to handle communication over large networks with little administrative oversight.

Fastpass on the other hand, uses an entity born out of innovation known as "arbiter" to decide which nodes in the network may send data to which others during which periods of time. This system requires each node to issue a request to the arbiter and in turn receive routing assignment regarding the data packet to be transmitted.

Now, according to Jonathan Perry, this piece of communication between the arbiter and the node requires 40 microseconds through a rough estimate. The key to Fastpass's efficiency is a technique of splitting up the task by assigning transmission times so that it can be performed in a parallel configuration on separate cores. Surprisingly, the researcher's experiments indicate that an arbiter with eight cores, or processing units, can keep up with a network transmitting 2.2 terabits of data per second. It is estimated that Fastpass would potentially reduce the administrative cost and equipment costs along with the pain and suffering to provide good service to the users.

STUDENT MEMBERS

THIRD YEAR

Adarsh Chaudhary
Aishwarya Chauhan
Asmita Pal
Divi Khare
Mudit Saxena
Pragya Pandey
Rajesh Kumar Ojha
Ritika Gera
Saurabh Dubey
Shweta
Sonali Mishra
Vijaya Laxmi Acharya
Vishal Sharma

The fact that it could have been 200 gigabits per second without the cleverness of the engineering is befitting enough to leave a tech savvy person in euphoria.

The bottom line that is agreed upon by all of them is the one of matching source and destination servers for each time slot. The dexterously engineered Fastpass mitigates the challenge in a unique manner- it assigns each core its own time slot, and the core with the first slot scrolls through the complete list of pending transmission requests. Each time it comes across a pair of servers, neither of which has received an assignment, it schedules them for its slot. All other requests involving either the source or the destination are simply passed on to the next core, which repeats the process with the next time slot. Each core thus receives a slightly attenuated version of the list the previous core analyzed.

Taking into consideration, the parameters on which networks are evaluated, the crucial question that arises is whether a centralized network-management system like Fastpass can handle the volume of requests generated by the largest of today's server farms. Another obvious challenge that comes to the fore is that of ensuring the security and robustness of the network since its operation is centralized. A breakdown in its arbiter can lead to complete network failure which also increases the system's vulnerability towards cyber-crime in its implementation in future.