Shri Pandurang Pratishthan

Karmayogi Polytechnic College, Shelve

Department of Computer Technology

TechBite

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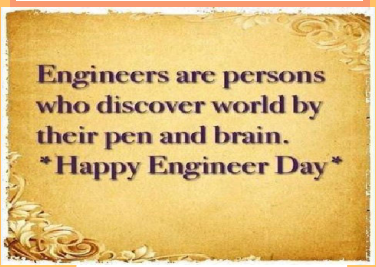
सर मोक्षगुंडम विश्वेश्वरय्या



Editorial

It gives me immense pleasure to present second issue of departmental newsletter **'TechBite'** on the occasion of **Engineer's Day**. Once again I would express my sincere thanks to our Hon. Principal **Dr. Ajit Kanase Sir** and our HOD **Mr. D. J. Ghanawajeer** sir for giving me opportunity to publish this second issue. I would say thanks to all my colleagues and students friends to co-operating me in all aspects.

Mr. Sachin M. Jagadale

Ms. Vaishnavi Ghadage

Mr. Amar Vagare

Our Vision

To attain academic excellence in computer technology and produce proficient engineers with moral values.

Our Mission

- To make use of best teaching-learning methodology to impart quality education in computer technology.
- To provide a learning environment to enhance ability of students to accept latest trends in computer industry.
- To establish industry interaction program to get exposure of corporate work culture.
- To groom our students to become followers of professional and ethical practices.

Principal's Message

*I am pleased to write message for second issue of the "**Tech-Bite,**" newsletter of computer technology department. Idea of beginning this newsletter is very ingenious. This effort of encouraging students and to provide them platform for innovate and creative writing deserves oodles of appreciation. I am very certain that the newsletter will prove to be very informative and efficacious. I convey my best wishes to students, faculty members and head of computer technology department in their endeavor for **World Class**.*

Dr. Ajit Kanase.

HOD's Message

It gives me great pleasure to come up with second issue of our departmental newsletter 'Tech-Bite'. The journey have been started with the little step. This newsletter is a medium of expressing our achievements, activities, and efforts of our students. We have conducted activities like, workshop on Android Technology for third year students, Industrial visits at webmab, aplomb, and JIO also we arranged a guest lecture of Dr. Munir Sayyad on Blockchain Technology. I would express my sincere thanks to our Honorable Principal Dr. Ajit Kanase Sir for giving us permissions to carryout such activities and kind support. Thanks You.

Mr. D. J. Ghanawajeer

News about the Chandrayaan 2

An Indian spacecraft's unprecedented attempt to make a soft, controlled landing in the moon's south polar region has ended in excruciating silence: Shortly before touchdown, the robotic lander Vikram—part of the Chandrayaan-2 mission—fell out of contact with mission control. The Indian Space Research Organization, India's space agency, says that the spacecraft stopped communicating with Earth when it was within 1.3 miles of the lunar surface.

"The Vikram descent was as planned, and normal performance was observed, up to an altitude of 2.1 kilometers," said Sivan, ISRO's chairman, in a statement roughly half an hour after signal loss. "The data is being analyzed." In addition to setting a global first, a successful landing would have made India just the fourth country to touch down anywhere on the lunar surface, and only the third nation to operate a robotic rover there. Nevertheless, the Chandrayaan-2 mission's orbiter remains safely in lunar orbit, with a year-long scientific mission ahead of it.

"India is proud of our scientists! They've given their best and have always made India proud," Indian prime minister Narendra Modi said in a statement on Twitter after Sivan's update. "These are moments to be courageous, and courageous we will be!"

Like any voyage to a world beyond Earth, Vikram's flight was a risky endeavor, requiring the lander to slow itself down to a near standstill, autonomously scan for surface obstacles, and then take steps to avoid them during touchdown. The majority of attempts to land robots on the moon have ended in failure, either during launch or on the way to the surface.

"Even though we got a successful lunar orbital insertion, landing is the terrifying moment," Sivan said in an August press conference.

Sarthak Sawant
Amar Vagare
Akshay Shide

Edge computing

Edge computing will increase as use the Internet of Things (IoT) devices. Will increases by 2022, the global edge computing market is expected to reach $6.72 billion. As with any growing market, this will create job demand, primarily for software engineers.

Edge computing is a distributed computing paradigm which brings computation and data storage closer to the location where it is needed, to improve response times and save bandwidth.

The increase of IoT devices at the edge of the network is producing a massive amount of data to be computed to data centers , pushing network bandwidth requirements to the limit.

Despite the improvements of network technology, data centres cannot guarantee acceptable transfer rates and response times, which could be a critical requirement for many applications.

By moving services to the edge, it is possible to provide content caching, service delivery, storage and IoT management, resulting in better response times and transfer rates.

At the same time, distributing the logic in different network nodes introduces new issues and challenges. Cloud Computing operates on "Big Data" while Edge Computing operates on "Instant Data" that is real-time data generated by sensors or users.

Pratidnya Deshmukh (TY CM)

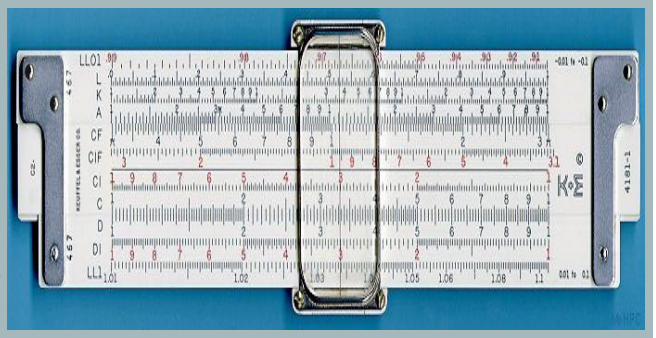
TechBite

Early Generation Computers

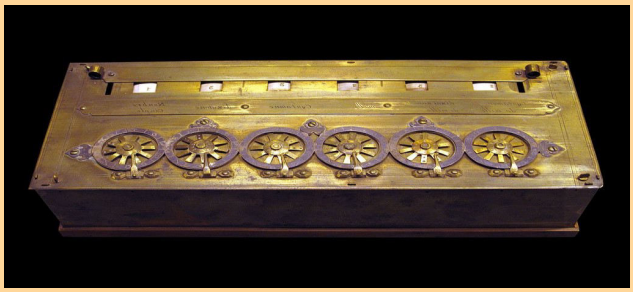
The Abacus (*plural* abaci or abacuses), also called a counting frame, is a calculating tool that was in use in the ancient Near East, Europe, China, and Russia, centuries before the adoption of the written Hindu–Arabic numeral system. Although today many use calculators and computers instead of abacuses to calculate, abacuses still remain in common use in some countries. Merchants, traders and clerks in some parts of Eastern Europe, Russia, China and Africa use abacuses, and they are still used to teach arithmetic to children. Some people who are unable to use a calculator because of visual impairment may use an abacus.

Napier's bones are a manually-operated calculating device created by John Napier of Murchison, Scotland for calculation of products and quotients of numbers. The method was based on lattice multiplication, and was also called *Rabdology*.

The slide rule, also known colloquially in the United States as a slip stick, is a mechanical analog computer. As graphical analog calculators, slide rules are closely related to monograms', but the former are used for general calculations, whereas the latter are used for application-specific computations. The slide rule is used primarily for multiplication and division, and also for functions such as exponents, roots, logarithms, and trigonometry, but typically not for addition or subtraction. Though similar in name and appearance to a standard ruler, the slide rule is not meant to be used for measuring length or drawing straight lines.



Pascal designed the machine in 1642. After 50 prototypes, he presented the device to the public in 1645, dedicating it to Pierre Séguier, then chancellor of France. Pascal built around twenty more machines during the next decade, many of which improved on his original design. In 1649, King Louis XIV of France gave Pascal a royal privilege, which provided the exclusive right to design and manufacture calculating machines in France. Nine Pascal calculators presently exist; most are on display in European museums. Many later calculators were either directly inspired by, or shaped by the same historical influences which led to, Pascal's invention.



Courtesy: Wikipedia

Collected by: Mr. D. J. Ghanawajeer & Mr. S. M. Jagadale and Editorial Team

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Industrial Visits

Visits at
WapMebs
and
Aplomb Solutions
Pandharpur

Visits
@
JIO
Mumbai

Guest Lectures

Guest Lecture By **Dr. Munir Sayyad** (Vice President JIO) & **Mr. Ishwarchand Bandil** on BLOCKHAIN

Workshop

3 Days Workshop was Organized by Department of Computer Technology and iGAP Technologies Kolhapur on Android for Third Year Students.

"An Engineer is the Person who Applies Skills and Knowledge of Basic Science for the Good of Society"