FUTURE GEN

Engineering with values.

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FACULTIES

MR. S.A. MUJAWAR (HOD)
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MRS A.T.KULKARNI (LECTURER)
B.E IT, M.TECH DSC(APP.)

MR A.A.PARITEKAR (HOD)
B.E IT, M.TECH AIML (APP.)

MS P.P.MAHAJAN (LECTURER)
B.E CSE

MS M.M.PAWAR (LECTURER)
B.E ETX, M.TECH DSC (APP.)

MS S.P.GAIKWAD (LECTURER)
B.E CSE, M.TECH(APP.)

CHIEF EDITOR'S DESK

The Computer Engineering department aims at development of a beneficial upbringing for knowledge, by use of appropriate computing technologies in its everyday activities. The department mainly equips its students with diploma level expertise and appropriate skills in the field of computer science. Students at the computer engineering department are nurtured to become best hardware Engineer, software professionals or Entrepreneurs in their own innovative way. This semester we organized a guest lecture and Industrial visit which helped students to learn advanced software development , Basics of .net platformand Fundamentals of networking and Linux.

MR. MUJAWAR S.A
(HOD COMPUTER ENGINEERING)

Academic Achievements

MSBTE WINTER 2023-24

THIRD YEAR

RUSHIKESH RANJIT POWAR
93.67 %

PRIYA PRAMOD NARSUGADE
93 %

SUDIKSHA SAGAR KHIYANI
92.67 %

SECOND YEAR

KUMBHAR PRATIK SACHIN
93.87 %

KUMHAR GANESH SHANKAR
93.07 %

NAGVEKAR KAUSTUBH CHANDRASHEKHAR
92.80 %

FIRST YEAR

SONAR HARSHWARDHAN UTTAM
87.41%

PATIL SAMIKSHA DATTATRAY
86.82%

DESAI SOMNATH UTTAM
86.35%

MSBTE SUMMER 2023-24

THIRD YEAR

BEDGE RUTUJA RANGRAO
95.17 %

PRIYA PRAMOD NARSUGADE
94.71 %

POWAR RUSHIKESH RANJIT
94.47 %

SECOND YEAR

KUMBHAR GENESH SHANKAR
95.07 %

KUMBHAR PRATIK SACHIN
93.60 %

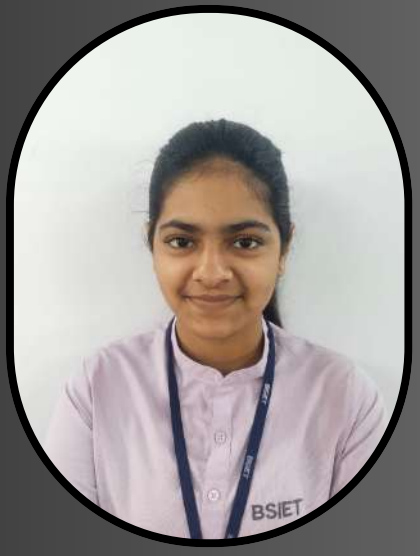
GUDALE NAGESH SHIVAMBH
93.60 %

GURAV SNEHA SADANAND
92.40 %

FIRST YEAR

NARKE SAMRUDDHI KASHINATH
90.35%

ADNAIK SHRAVANI SAMBHAJI
89.18%



PATIL PRADNYA BAPUSO
88.35

CO - CURRICULAR ACHIEVEMENTS WINTER 2023-24

1. SAEE GHORPADE AND RUSHIKESH POWAR PARTICIPATED IN VARIOUS STATE AND NATIONAL LEVEL PAPER PRESENTATION HELD ACROSS WESTERN MAHARASHTRA.

2. RUSHIKESH POWAR AND SWAPNIL DALVI WON FIRST PRIZE IN NATIONAL LEVEL PAPER PRESENTATION IN SANT GAJANAN MAHARAJ RURAL POLYTECHNIC.

3. PRATIK KUMBHAR AND SNEHA GURAV WON FIRST PRIZE IN NATIONAL LEVEL PAPER PRESENTATION IN A D SHINDE COLLEGE OF ENGINEERING.

4. MORE THAN 10 STUDENTS FROM FY, SY AND TY COMPUTER HAS PARTICIPATED IN NATIONAL LEVEL TECHNICAL EVENT "REFLEX 2K24" PAPER PRESENTATION AND C CODING" AT AMGOI, VATHAR AND WONVARIOUS PRIZES AS WELL.

CO - CURRICULAR ACHIEVEMENTS SUMMER 2023-24

1. **MORE THAN 10 STUDENTS FROM FY, SY AND TY COMPUTER HAS PARTICIPATED IN NATIONAL LEVEL TECHNICAL EVENT "REFLEX 2K24" PAPER PRESENTATION AND C CODING" AT AMGOI, VATHAR AND WON VARIOUS PRIZES AS WELL.**
2. MORE THAN 10 STUDENTS FROM FY, SY AND TY COMPUTER HAS PARTICIPATED IN NATIONAL LEVEL TECHNICAL EVENT "PROBE 2K24" PAPER PRESENTATION AND C CODING" AT PVPIT, BUDHGAON AND WON VARIOUS PRIZES AS WELL.
3. **MORE THAN 10 STUDENTS FROM FY, SY AND TY COMPUTER HAS PARTICIPATED IN NATIONAL LEVEL TECHNICAL EVENT "DIGIFEST 2K23" PAPER PRESENTATION AND C CODING" AT NPK, KOLHAPUR AND WON VARIOUS PRIZES AS WELL.**
4. **SAEE GHORPADE, PRATIK KUMBHAR, SNEHA GURAV, SAAD MUJAWAR WAS THE FIRST RUNNER UP PRIZE IN STATE LEVEL PAPER PRESENTATION IN ICRE GARGOTI.**

EVENT ACHEIVEMENTS

EXTRA CURRICULAR ACHEIVMENTS

1. SHREEOM NARKAR FROM TY COMPUTER HAD PARTICIPATED IN ZONAL CHESS TOURNAMENT AT YASHWANTRAO BHOSALE POLYTECHNIC SAWANTWADI.

2. DEPARTMENTAL GIRLS WERE PART OF COLLEGE TEAM THAT TRAVELLED TO LATUR FOR INTERZONAL KHO KHO COMPETITION.

3. SHREEOM NARKAR FROM TY COMPUTER HAD PARTICIPATED IN ZONAL CHESS TOURNAMENT AT YASHWANTRAO BHOSALE POLYTECHNIC SAWANTWADI.

4. NILAY POTUDE FROM SY COMPUTER HAD PARTICIPATED IN ZONAL CHESS TOURNAMENT AT YASHWANTRAO BHOSALE POLYTECHNIC SAWANTWADI.

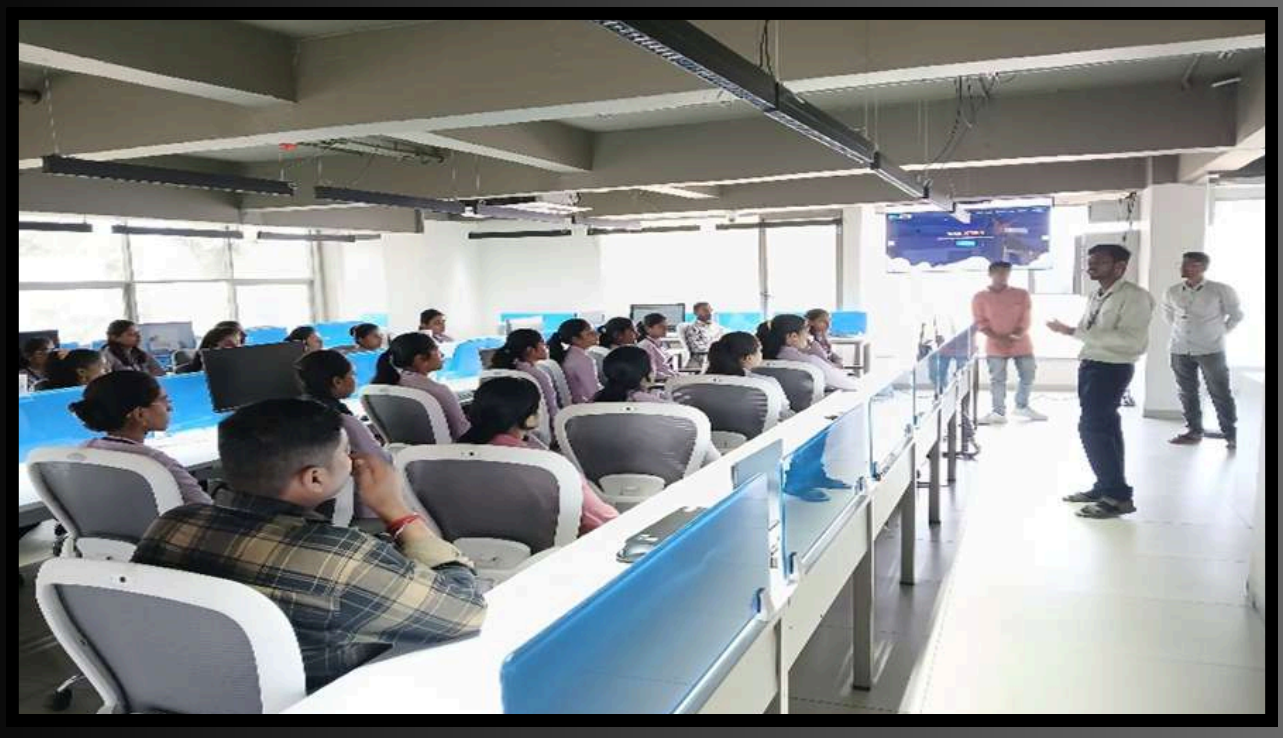
5. DEPARTMENTAL GIRLS WERE PART OF COLLEGE TEAM THAT TRAVELLED TO LATUR FOR INTERZONAL KHO-KHO COMPETITION.

6. BSIET COMPUTER DEPARTMENT WON THE GENERAL CHAMPIONSHIP HELD AT BSIET JALLOSH 2K24

ANNUAL SPORTS DAY

INDUSTRIAL VISITS
2023-24

INDUSTRY NAME: WALSTAR TECHNOLOGIES PVT. LTD, IN KOLHAPUR
CLASS: SY
WALSTAR TECHNOLOGIES PVT. LTD, IN KOLHAPUR IS A WELL-ESTABLISHED AND AIMED AT UNDERSTANDING THE DYNAMICS OF THE IT INDUSTRY, PARTICULARLY IN THE CONTEXT OF SOFTWARE DEVELOPMENT, DIGITAL SOLUTIONS, AND AUTOMATION.



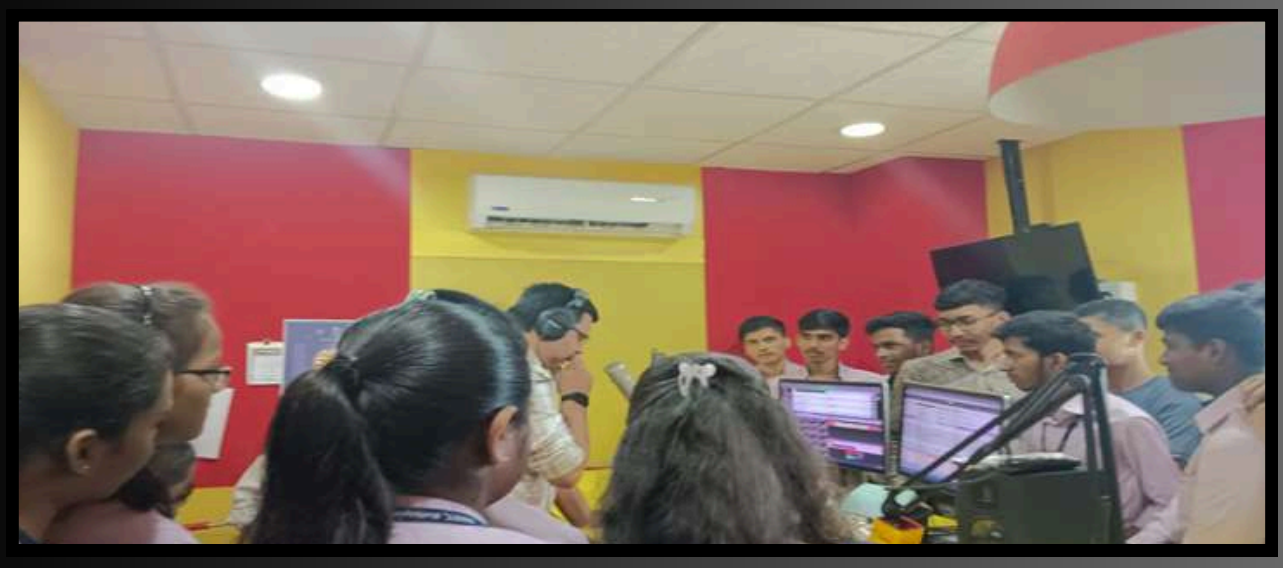
INDUSTRY NAME: RADIO MIRCHI, ENILKOLHAPUR
SUBJECT: DATABASE MANAGEMENT SYSTEM (22319)
CLASS: SY

THE INDUSTRIAL VISIT WAS CONDUCTED ON 12/10/2023 AT RADIO MIRCHI ENIL, BLOK NO 301, 3 RD FLOOR, ETERNITY SQUARE BUILDING, CS NO 2150 A/1A, E WARD, TARABAI PARK, KOLHAPUR416003. IT IS A COMPULSORY VISIT AS PART OF CURRICULUM OF MSBTE FOR ABOVE SUBJECT.

RADIO MIRCHI ALSO KNOWN AS 98.3 MIRCHI, IS A NATIONWIDE NETWORK OF PRIVATE FM RADIO STATIONS IN INDIA. IT IS OWNED BY THE ENTERTAINMENT NETWORK INDIA LTD (ENIL), WHICH IS ONE OF THE SUBSIDIARIES OF THE TIMES GROUP.

THE RADIO MIRCHI STARTED IN 2007 AS AN FM RADIO STATION IN KOLHAPUR. ITS FREQUENCY IS 98.3 MANISH EXPLAINED HOW THE FM WORKS .WHAT ALL PROGRAM IS SCHEDULED.

AND PROVIDES ALL TECHNICAL KNOWLEDGE. HE EXPLAINED TO THE STUDENT FM TOWER IS LOCATED AT PANHALA AND THE RANGE OF KOLHAPUR MIRCHI. THE DATABASE MANAGEMENT SYSTEM VARIOUS CONCEPT GOT CLEARED AS STUDENT GOT INTERESTED AND INTERACTED WELL WITH ENGINEER.



INDUSTRY NAME: TCOGNITION SOFTWARE COMPANY IN KOLHAPUR, MAHARASHTRA

SUBJECT: ADVANCED JAVA PROGRAMMING (22517), SOFTWARE TESTING (22518)

CLASS: TY

THE INDUSTRIAL VISIT WAS CONDUCTED ON **27/09/2023** AT TCOGNITION SOFTWARE COMPANY IN KOLHAPUR, MAHARASHTRA, DIST. KOLHAPUR. IT IS A COMPULSORY VISIT AS PART OF CURRICULUM OF MSBTE FOR ABOVE SUBJECT.

TCOGNITION SOFTWARE COMPANY IN KOLHAPUR IS A WELL-ESTABLISHED AND AIMED AT UNDERSTANDING THE DYNAMICS OF THE IT INDUSTRY, PARTICULARLY IN THE CONTEXT OF SOFTWARE DEVELOPMENT AND INNOVATION. THE VISIT BEGAN WITH A COMPREHENSIVE OVERVIEW OF TCOGNITION, INCLUDING ITS HISTORY, MISSION, AND CORE VALUES. STUDENTS LEARNED ABOUT THE COMPANY'S FOCUS ON LEVERAGING TECHNOLOGY TO SOLVE COMPLEX BUSINESS CHALLENGES AND ENHANCE CUSTOMER EXPERIENCES.

TCOGNITION SHOWCASED SOME OF ITS FLAGSHIP TECHNOLOGIES AND SOLUTIONS DURING THE VISIT. STUDENTS HAD THE OPPORTUNITY TO SEE DEMONSTRATIONS OF THEIR SOFTWARE PRODUCTS, INCLUDING AI ANALYTICS TOOLS, DATA MANAGEMENT PLATFORMS, AND CLOUD-BASED APPLICATIONS. THE EMPHASIS ON INNOVATION AND STAYING ABREAST OF EMERGING TECHNOLOGIES WAS EVIDENT THROUGHOUT THE PRESENTATION.

Industrial Expert Lectures

Industrial Guest Lecture on "Software Testing" by Mrs. Sayali Patil:
Purpose: Guest lecture on "Software Testing" was arranged for Second year computer engineering students. Objective of that lecture was to identify different job profiles in IT services, job description, different IT services companies and their needs.

ENTREPRENEURSHIP DEVELOPMENT PROGRAM

A three-day entrepreneurship development program concluded at Bapuji Salunkhe Institute of Engineering and Technology. In the programs, various industry experts guided the students to become entrepreneurs. More than two hundred students studying final year Diploma Engineering participated in these programs.

“Jallosh 2024”: Annual Social & Sports Event

"Jallosh 2024" an annual social event was organized in institute on 20 Jan 2024 at BSIET. "Jallosh 2024" was 1 day festival of college that include various events where in student get the chances to think, step forward and showcase their talent. Various events had organized like face painting, Photography competition, rangoli competition, Mehandi competition, singing and dancing competition, fasion-show etc. more than 35 students from computer department had participated in event. Prof V D Bhirdi sir had inaugurated all events and wished best luck to all participants.

Student Article

Arduino

-Mr Pawar Rushikesh (TY Comp)

Arduino IDE:

The Arduino integrated development environment (IDE) is a cross platform application (For Windows, Mac OS, and Linux) that is written in the programming language Java. It is used to write and upload program to arduino board.

The source code for IDE is released under the GNU (General Public License) version 2. The Arduino IDE supports the languages C and C++ using special rules of code structuring. The Arduino IDE supplies a software library from the writing project, which provides many common input and output procedures.

Arduino UNO R3:

Figure: Arduino-UNO R3

The first Arduino was introduced in 2005, aiming to provide a low cost, easy way for novices and professionals to create devices that interact with their environment using sensors and actuators. The Arduino microcontroller was initially created as an educational platform for a class project at the Interaction Design Institute Ivrea in Milan (Italy) in 2005. It derived from a previous work of the Wiring microcontroller designed by Hernando Barragan in 2004. From the beginning, the Arduino board was developed to attract artists and designers. The Wiring microcontroller was created by Hernando Barragan to be used for parsing data to electronic devices. His aim was that it could be used by non-technical people who only had basic experience with using computers. He first of all wanted it to be used as a prototyping tool. Since he needed help to create an easy software tool to programmed the board he engaged Casey Reas and Massimo Banzi as his assistants. Reas created the visual programming language for the prototyping tool. Common examples of such devices intended for beginner hobbyists include simple robots, thermostats, and motion detectors.

MQ5 Sensor:

Figure: MQ5 Sensor

A MQ5 sensor is a device that senses smoke, typically as an indicator of fire. Commercial security devices issue a signal to a fire alarm control panel as part of a fire alarm system, while household detectors, known as smoke alarms, generally issue a local audible or visual alarm from the detector itself.

Flame sensor:

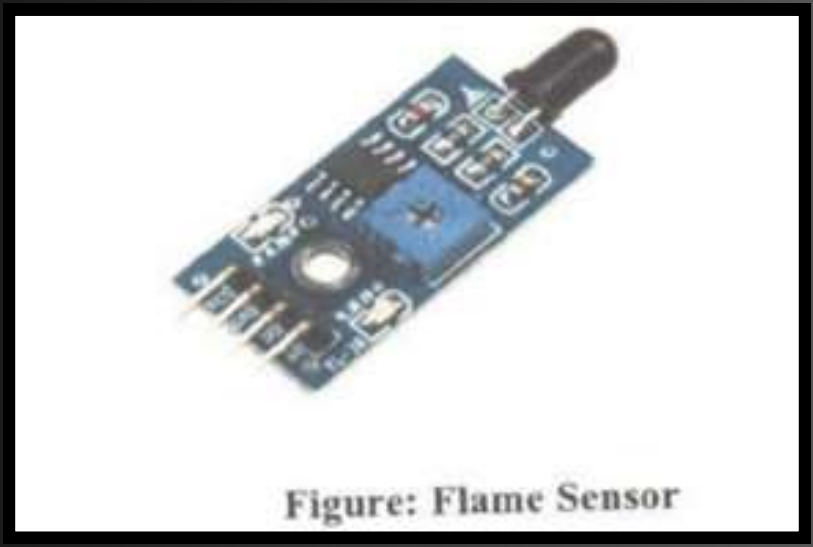


Figure: Flame Sensor

A Flame sensor is a device that senses fire, typically as an indicator of fire. Commercial security devices issue a signal to a fire alarm control panel as part of a fire alarm system, while household detectors, known as smoke alarms, generally issue a local audible or visual alarm from the detector itself.

GSM:

Figure: GSM Module 800

GSM (Global System for Mobile communication) is a digital mobile telephony system that is widely used in Europe and other parts of the world. GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the three digital wireless telephony technologies (TDMA, GSM, and CDMA). GSM digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot. It operates at either the 900 MHz or 1800 MHz frequency band.

GSM Module:

GSM/GPRS module is used to establish communication between a computer and a GSMGPRS system. Global System for Mobile communication (GSM) is an architecture used for mobile communication in most of the countries. Global Packet Radio Service (GPRS) is an extension of GSM that enables higher data transmission rate. GSM/GPRS module consists of a GSM/GPRS modem assembled together with power supply circuit and communication interfaces (like RS-232, USB, etc) for computer. GSM/GPRS MODEM is a class of wireless MODEM devices that are designed for communication of a computer with the GSM and GPRS network. It requires a SIM (Subscriber Identity Module) card just like mobile phones to activate communication with the network. Also they have IMEI (International Mobile Equipment Identity) number similar to mobile phones for their identification. A GSM/GPRS MODEM can perform the following operations:

1. Receive, send or delete SMS messages in a SIM.
2. Read, add, search phonebook entries of the SIM.
3. Make, Receive, or reject a voice call.

The MODEM needs AT commands, for interacting with processor or controller, which are communicated through serial communication. These commands are sent by the controller/processor. The MODEM sends back a result after it receives a command. Different AT commands supported by the MODEM can be sent by the processor/controller/computer to interact with the GSM and GPRS cellular network.

Faculty Article

WORLD OF CRYPTO CURRENCIES

-By Mr. S. A. Mujawar (BE CSE)

Bitcoin originated with the white paper that was published in 2008 under the pseudonym "Satoshi Nakamoto." It was published via a mailing list for cryptography and has a similar appearance to an academic paper. The creators' original motivation behind Bitcoin was to develop a cash-like payment system that permitted electronic transactions but that also included many of the advantageous characteristics of physical cash. Historically, when it comes to transacting money or anything of value, people and businesses have relied heavily on intermediaries like banks and governments to ensure trust and certainty Middlemen perform a range of important tasks that help build trust into the transactional process like authentication & record keeping. The need for intermediaries is especially acute when making a digital transaction. Because digital assets like money, stocks & intellectual property, are essentially.

files, they are incredibly easy to reproduce. This creates what's known as the double spending problem (the act of spending the same unit of value more than once) which until now has prevented the peer to peer transfer of digital assets but what if there was a way of conducting digital transactions without a third party intermediary? Well, a new technology exists today that makes this possible. But before we dive into the mechanics of this revolutionary technology, it's important to provide a little context.

Bitcoin is a virtual monetary unit and therefore has no physical representation. A Bitcoin unit is divisible and can be divided into 100 million "Satoshis," the smallest fraction of a Bitcoin. The Bitcoin Blockchain is a data file that carries the records of all past Bitcoin transactions, including the creation of new Bitcoin units. It is often referred to as the ledger of the Bitcoin Goods Stone ownership Buyer Seller Communication Figure 4 Payment System with a Distributed Ledger Berentsen and Schär Federal Reserve Bank of St. Louis REVIEW First Quarter 2018 5 system. The Bitcoin Blockchain consists of a sequence of blocks where each block builds on its predecessors and contains information about new Bitcoin transactions. The average time between Bitcoin blocks is 10 minutes. The first block, block #0, was created in 2009; and, at the time of this writing, block #494600 was appended as the most recent block to the chain. Because everyone can download and read the Bitcoin Blockchain, it is a public record, a ledger that contains Bitcoin ownership information for any point in time. The word "ledger" has to be qualified here. There is no single.
instance of the Bitcoin Blockchain. Instead, every participant is free to manage his or her own copy of the ledger. As it was with the stone money, there is no central authority with an exclusive right to keep accounts. Instead, there is a predefined set of rules and the opportunity for individuals to monitor that other participants adhere to the rules. The notion of "public record of ownership" also has to be qualified because the owners of Bitcoin units usually remain anonymous through the use of pseudonyms. To use the Bitcoin system, an agent downloads a Bitcoin wallet. A Bitcoin wallet is software that allows the receiving, storing, and sending of (fractions of) Bitcoin units.3 The next step is to exchange fiat currencies, such as the U.S. dollar, for Bitcoin units. The most common way is to open an account at one of the many Bitcoin exchanges and to transfer fiat currency to it. The account holder can then use these funds to buy Bitcoin units or one of the many other cryptoassets on the exchange. Due to the widespread adoption of Bitcoin, the pricing on large exchanges is very competitive with relatively small bid-ask spreads. Most exchanges provide order books and many other financial tools that make the trading process transparent.

Thank you for taking the time to read our Magazine; your interest and engagement encourage us to continue sharing the achievements, events, and innovations that shape our vibrant college community.