




SHRI VILE PARLE KELAVANI MANDAL'S

SHRI BHAGUBHAI MAFATLAL POLYTECHNIC



Volume 01 Academic Year 2022-23

MECH 3RD SEM



Mechanical Engineering E-Newsletter



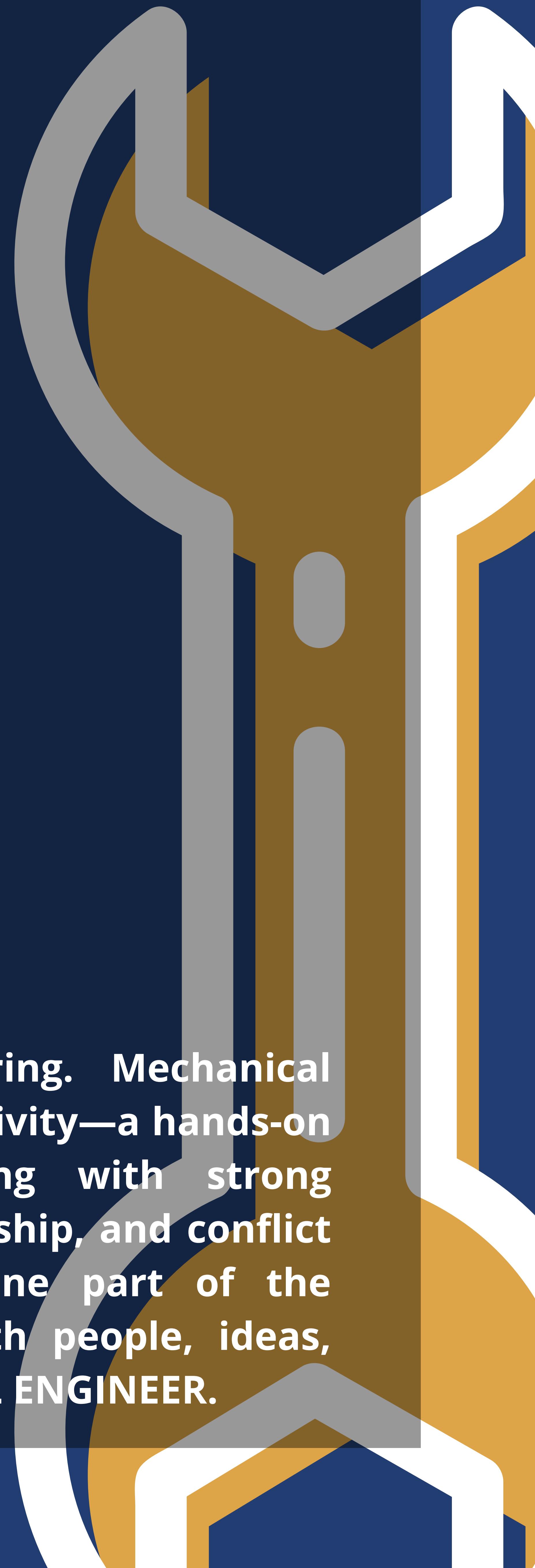
MECHANICAL ENGINEER

Mechanical engineers have an enormous range of opportunity and their education mirrors this breadth of subjects. Students concentrate on one area while strengthening analytical and problem-solving skills applicable to any engineering situation. Mechanical engineering is necessary for society. Because there is such a high need for this expertise in so many industries, the opportunities for a newly graduated mechanical engineer are virtually limitless. Careers in the automotive, aerospace, electronics, biotechnology, and energy industries are continuously in high demand.

Disciplines within mechanical engineering include but are not limited to:

- Acoustics
- Aerospace
- Automation
- Automotive
- Autonomous Systems
- Biotechnology
- Composites
- Computer Aided Design (CAD)
- Control Systems
- Cyber security
- Design
- Energy
- Ergonomics
- Human health
- Manufacturing and additive manufacturing
- Mechanics
- Nanotechnology
- Production planning
- Robotics
- Structural analysis

Problem solving is the heart of engineering. Mechanical engineering, at its core, involves practical creativity—a hands-on understanding of the work involved—along with strong interpersonal skills such as networking, leadership, and conflict resolution. Developing a product is only one part of the equation; understanding how to interact with people, ideas, data, and economics fully makes a MECHANICAL ENGINEER.



Editors MechAdyant

STAFF COORDINATOR

Mr. Virag A. Timbadia

STUDENTS TEAM

- Master Yug Panchal
- Ms. Tanmayee Parab
- Mr. Vanshdeep Singh
- Master Rudra Mehta
- Ms. Marshavi Parikh
- Mr. Raj Shah
- Master Pratham Adhyaru



आ..... आ..... आ.....

महाराष्ट्र की धरोहर का, गौरव है SBMP
ज्ञानसागर की उमड़ती, लहर है SBMP
SBMP.... SBMP.... SBMP....

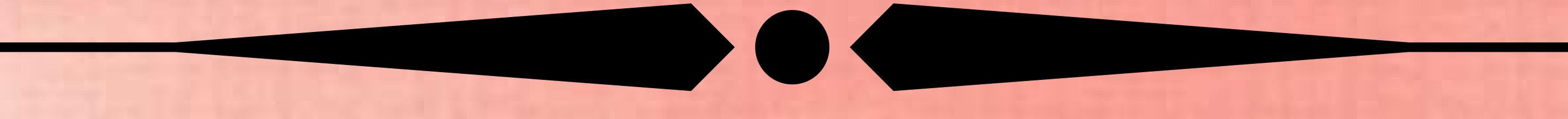
SVKM का छत्र धरे, बने सारथी तंत्र के,
इंद्रधनुष के रंग में रंगे, हुए पारखी यंत्र के,
योग: कर्मसु कौशलम्, मंत्र मन में धरे,
असतो मा सदगमय के, राह पर हम चले,
SBMP.... SBMP.... SBMP....

प्रकाश की परिभाषा, और ज्ञान की अभिलाषा,
जगाए मन में कुछ नया, सीखने की जिज्ञासा,
हो चाहे गुरुकुल कोई, या नालंदा तक्षशिला,
हर रूप का प्रतिरूप ये, शिक्षा की आधारशिला,
SBMP.... SBMP.... SBMP....

जाते हुए कल से सीखी, आते हुए कल की कहानी,
विविध राग से सजती सफलता की कई जुबानी,
निराशाओं को तोड़ती, आशाओं की संजीवनी,
गंगोत्री माँ भारती, यश कीर्ति मनपावनी,
SBMP.... SBMP.... SBMP....

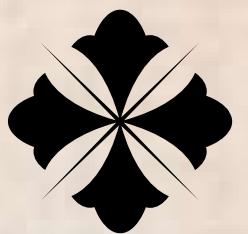
महाराष्ट्र की धरोहर की, यशगाथा SBMP
बूंद बूंद से सागर सम, परिवार है SBMP
SBMP.... SBMP.... SBMP.... SBMP.

MECHANICAL ENGINEERING



VISION

"To become a center of excellence in
the field of mechanical engineering
through need-based value education"



MISISON

M1- To impart quality education through continuous
up-gradation of curriculum and faculty development

M2- To encourage students to solve mechanical
engineering and real-life problems through industry-
institute interaction.

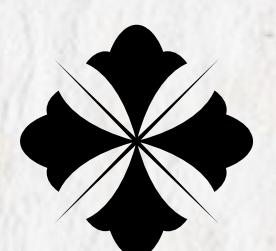
M3- To develop entrepreneur qualities and concern
for the society.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

PEO1 – Contribute to technological advancement through continuous learning in the field of mechanical engineering

PEO2 – Apply technical knowledge and skills to find effective solutions for the problems in mechanical engineering and other related disciplines

PEO3 – Develop skills in diploma graduates to address concerns of society and environment by communicating effectively to lead an interdisciplinary diverse team



PROGRAM SPECIFIC OBJECTIVES (PSOs):

PSO1 – Diploma graduates will be able to apply basic principles in the area of Design and Manufacturing Engineering.

PSO2 – Equip diploma graduates with technical skills to provide solutions in the field of Thermal Engineering.

MESSAGE

FROM HEAD OF THE DEPARTMENT



In tune with vision and mission, the Department of Mechanical Engineering at S. B. M. Polytechnic aims to provide knowledge, technologies, and their applications in the outer world through an effective teaching-learning process. We here have a vast curriculum that helps students to understand the courses deeply and apply its concepts practically for the benefit of society.

We have a huge infrastructure with well-equipped labs for a better understanding of courses for the students. We provide our students with dozens of opportunities for their skillful development through participation in various projects and activities like Making Quad Bike, Drones, Rockets, and Mini Projects at various levels like state, national, and international. The interesting part is that we are the first and only diploma college in the region that participates in such competitions.

We have well-qualified faculties, who are post-graduated from renowned universities and have experience in almost all the domains of Mechanical Engineering which includes Design, Thermal, Manufacturing, Automation, Mechatronics, and many more. We provide a "Six Months Implant Training" where students get exposure to the market through working in different companies. Students are trained in developing their leadership, managerial, and interpersonal skills by working in various committees, organizing events, and also through participating in various Curricular, Co-Curricular, and Extra-Curricular activities.

Our students will have a cheerful, productive, and satisfying experience at all levels of their program of studies to explore the amazing world of Mechanical Engineering. Our graduates are capable of working in a competitive market in a very good post.

I appreciate the efforts of Mech-Adyant Team Coordinator Mr. Virag A. Timbadia and his young energetic student team for compiling the journey and achievements of the department. I also thank my staff members for taking efforts to shape and mold the future of our students. I wish them good luck for their bright future.

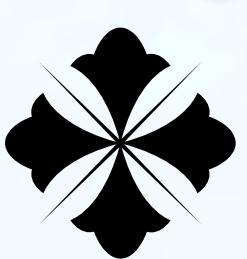
Mr. Ashok K. Chore
Head, Mechanical Engineering Department

SHRI BHAGUBHAI MAFATLAL

POLYTECHNIC

MECHANICAL ENGINEERING

➤ Dr. Mohd. Zafar Shaikh	☞ Principal
➤ Mrs. Neeta G. Kadukar	☞ Vice Principal
➤ Mr. Ashok K. Chore	☞ Head of Department
➤ Mr. Roshan R. Ambade	☞ Sr. Lecturer
➤ Mr. Gajanan J. Badwe	☞ Sr. Lecturer
➤ Mr. Amol D. Bele	☞ Sr. Lecturer
➤ Mr. Suhas B. Wasnik	☞ Sr. Lecturer
➤ Mr. Pravin R. Parate	☞ Sr. Lecturer
➤ Mr. Girish B. Deshpande	☞ Lecturer
➤ Mr. Ashutosh S. Shukla	☞ Lecturer
➤ Mr. Virag A. Timbadia	☞ Lecturer
➤ Mr. Shankar C. Kolekar	☞ W/S Supt
➤ Mr. Pratik P. Sawant	☞ Lecturer



➤ Mr. Pradeep Sutar	☞ Lab Asst.
➤ Mr. Vijay D. Kanojia	☞ I/C Chargeman
➤ Mr. M. Navgire	☞ W/S Lab Asst.
➤ Mr. P. M. Yadav	☞ Turner Instructor
➤ Mr. Nilesh M. Patil	☞ Carpentry Instructor
➤ Mr. Ashok Kamble	☞ Peon



PARA SARAIYA

SBMP Alumni 2016
Currently, student

"*ALWAYS DREAM BIGGER AND SNOOT BIGGER THAN YOU KNOW YOU CAN DO. DON'T BOTHER JUST TO BE BETTER THAN YOUR CONTEMPORARIES OR PREDECESSORS. TRY TO BE BETTER THAN YOURSELF.*"

- ANONYMOUS

► A JOURNEY TOWARDS SUCCESS

"TALKING ABOUT MYSELF, FROM A VERY YOUNG AGE, I ALWAYS HAD A SOFT SPOT FOR AIRCRAFTS AND AEROPLANES, WHICH MADE ME DECIDE TO BECOME AN AERONAUTICAL ENGINEER. SO PURSUING MY INTEREST, I TOOK ADMISSION IN THE MECHANICAL DEPARTMENT OF SBM POLYTECHNIC, ONE OF THE BEST POLYTECHNICS OF MUMBAI. BECAUSE OF ALL THE WONDERFUL PROFESSORS, THE ACADEMIC COURSE THEY SET AND MY PERSONAL EXPERIENCE AT SIEMENS, I REALIZED WHAT EXACTLY I WANTED FOR MY CAREER AND WHICH PARTICULAR FIELD I SHOULD PURSUE. BHAGUBHAI WAS INDEED A STRONG FOUNDATION FOR ME AT THE TENDER AGE OF 16. AFTER PASSING OUT, I DID MY BACHELORS FROM THAKUR COLLEGE OF ENGINEERING AND TECHNOLOGY WITH THE THOUGHT OF GETTING MY MASTERS OVERSEAS. CURRENTLY, I AM PURSUING MSC INDUSTRIAL ENGINEERING AND OPERATIONS MANAGEMENT FROM THE UNIVERSITY OF NOTTINGHAM, UK."



Meet Solanki

SBMP ALUMNI 2016

Motivation

The reason I chose mechanical engineering was that ever since my childhood, I had always been keen to learn the inner workings and functionings of various machines. An important aspect of mechanical engineering that I absolutely love is using your hands and brains to make things and solve problems. Mech Engineering is a wonderful field for those who like to do hands-on work and are interested in technology. Additionally, mechanical engineering is a versatile field that can lead to careers in many different industries.

Difficulties

AS A STUDENT, ACQUIRING SUCCESSFUL TIME MANAGEMENT SKILLS WAS THE BIGGEST DIFFICULTY I FACED. IT WAS AN ASPECT OF COLLEGE LIFE THAT I UNDERESTIMATED AND OVERCOMING IT WAS A CHALLENGE. I REALIZED THAT IF I TRIED TO PRIORITIZE MY TASKS AND DIDN'T DO EVERYTHING ALL AT ONCE, I WOULD BE ABLE TO COMPLETE ALL MY TASKS WITHOUT GETTING OVERWHELMED OR FRUSTRATED.

My Journey

AFTER GRADUATING FROM SBMP, I COMPLETED BACHELOR'S IN MECHANICAL ENGINEERING FROM S.V.K.M.'S D.J. SANGHVI COLLEGE OF ENGINEERING AND COMPLETED IT IN JUNE 2022. SBMP PLAYED A KEY ROLE IN HELPING ME ACHIEVE MY DREAM CAREER. I THANK THE HIGHLY QUALIFIED TEACHERS OF SBMP FOR THE EXCELLENT EDUCATION PROVISION, MOTIVATION AND THEIR GENTLE NUDGE TOWARDS ME TO REACH MY FULL POTENTIAL. FURTHERMORE, I AM THANKFUL FOR THE OPPORTUNITIES THAT SBMP PROVIDED SUCH AS THE EXTRACURRICULAR ACTIVITIES AND THE CHANCE TO INTERACT WITH PEOPLE FROM VARIOUS INDUSTRIES. I AM REALLY GLAD THAT I CHOSE SBMP AS MY ALMA MATER.

A word to the Juniors

I only have this to say.
Stay curious and learn as much as you can.
Build a strong network of professionals and mentors.
Take on challenging assignments and stretch yourself.
take care of your physical and mental health by practicing self-care habits.
Be a good role model and mentor for others who are looking to improve themselves.

Bhavya Sangoi

SBMP Alumni, 2016

"Bhagubhai's experience was one of the finest experiences when it came to education and a bit of fun. During my time there I learned a lot, thanks to the strong foundation laid for me by my teachers, which made it very easy for me to undergo my degree course.

After getting my diploma from SBM Polytechnic, I acquired my degree from K. J. Somaiya College of Engineering Vidyavihar and currently I'm an employee at Godrej & Boyce Mfg. Ltd. under the Corporate Procurement department.

Talking about difficulties, I did not face any. My policy is to work hard in order to gain what you want to achieve.



My advise for the juniors is to study hard because no one in interviews is going to be interested in how much you studied. Their main focus would be on what new you might be able to contribute to the company. Always self-motivate yourself and have the support of your friends during difficult times. I wish a very best of luck to all the juniors."

PARTICIPANTS

Kho-Kho

Roshan Singh
Pranav Pawar
Harsh Bhanushali
Roopesh Yadav
Vasu Soni
Ashish Kori
Pritesh Mahadik
Shubham Gholam
Atharva

Volleyball

Yash Chaugle
Pritesh Mahadik
Kaustubh Pinge

Cricket

Manas Gurav

Carrom

Saad Ansari

Badminton

Yug Panchal

Table Tennis

Rishabh Shah

Kabaddi

Pranav Pawar
Omkar Kode
Pratham Kalambatte
Yash Nanarkar
Ashish Kori



ACHIEVEMENTS



Winners in Inter-Department Competition

Roshan Singh

1st Price in Oral Competition(Azadi ka Amruth Mahotsav)
2nd Prize in Speech Competition(NSS on the occasion of Gandhi Jayanti)

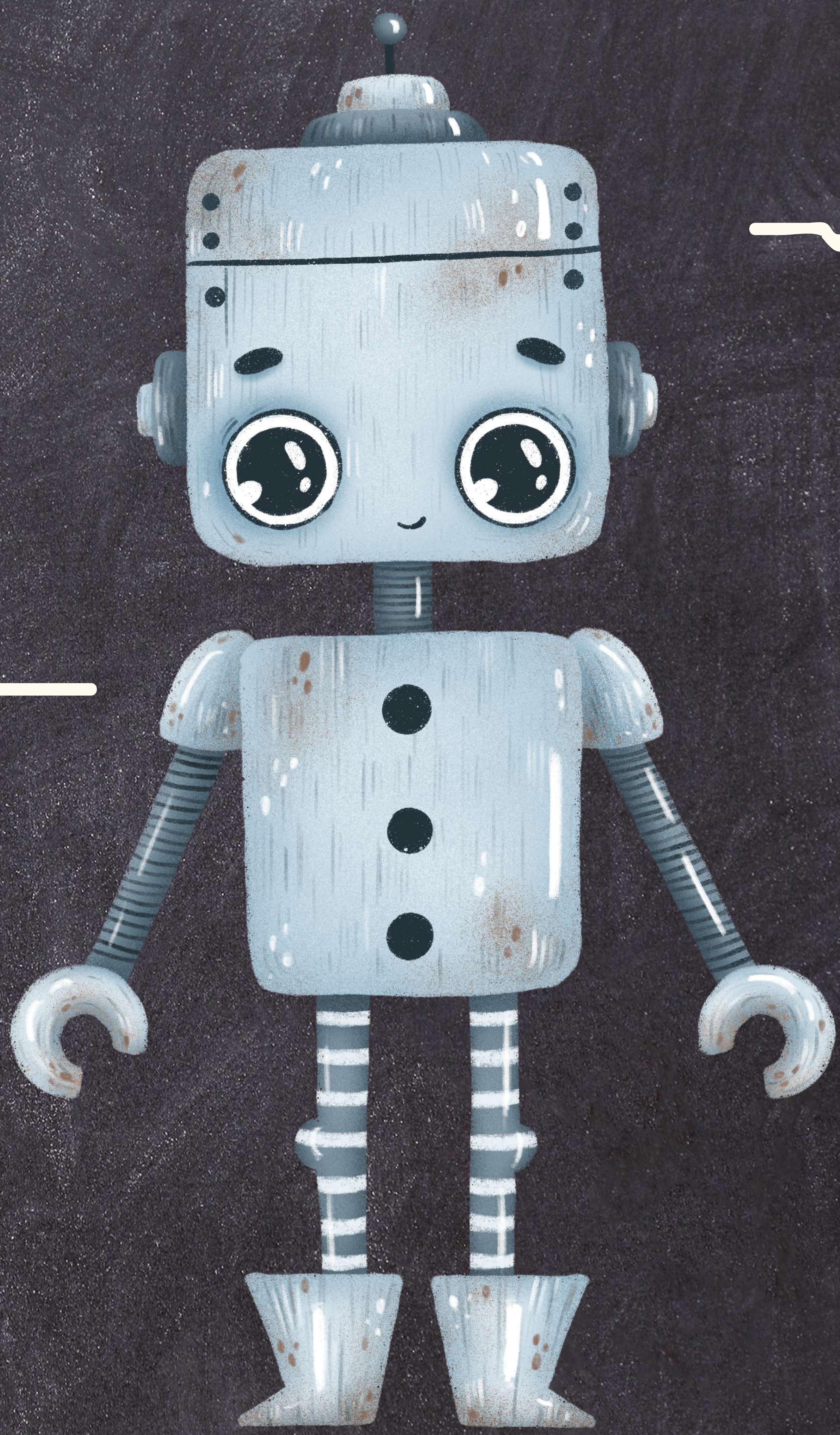
Yug Panchal

1st Price in movie making(Azadi ka Amruth Mahotsav)
3rd Price in Patriotic Song Competition

Tanmayee Parab

MUN Inter College Debate Competition
DJ-Sanghavi (Verbal Mention)

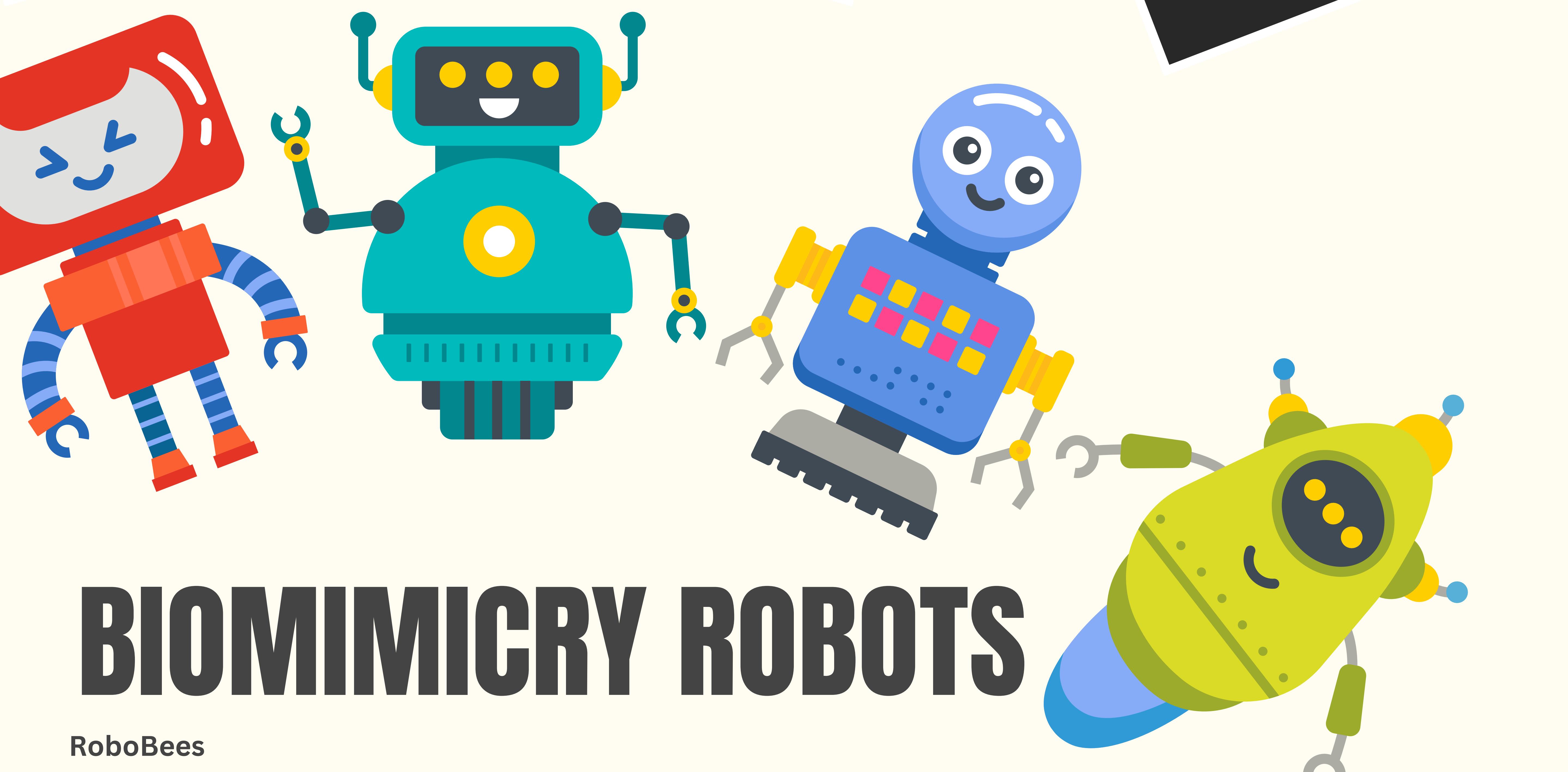
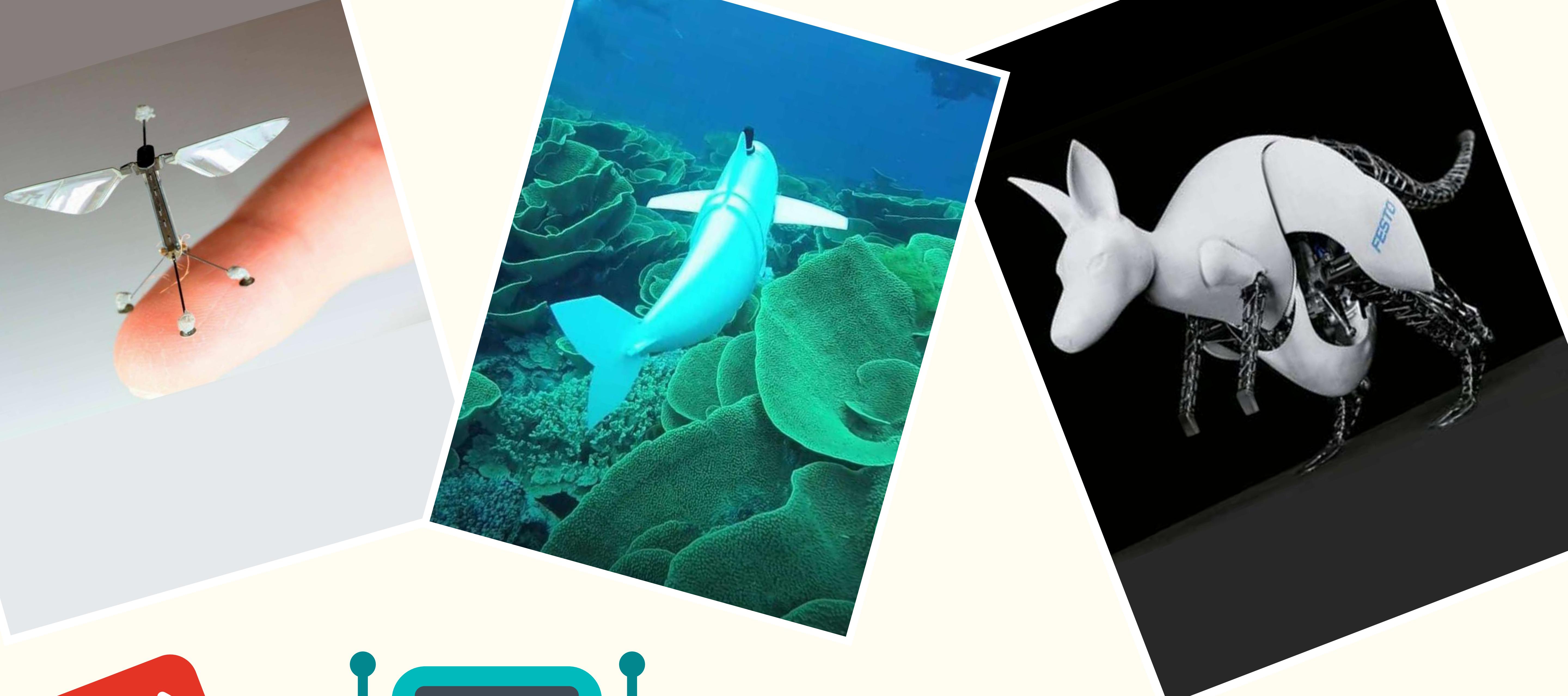
BLOGS





Robots

Robots can resemble human beings, but don't necessarily have to, and are capable of taking on any appearance and performing all types of functions. Humans or computers can program them, but they can also possess their own AI software routines that allow them to ingest and process information, and make decisions, as a living creature might. Some are even capable of self-learning through machine learning, a type of technology that allows robots (or computers of any kind, really) to get smarter with and learn from each interaction.



BIOMIMICRY ROBOTS

RoboBees

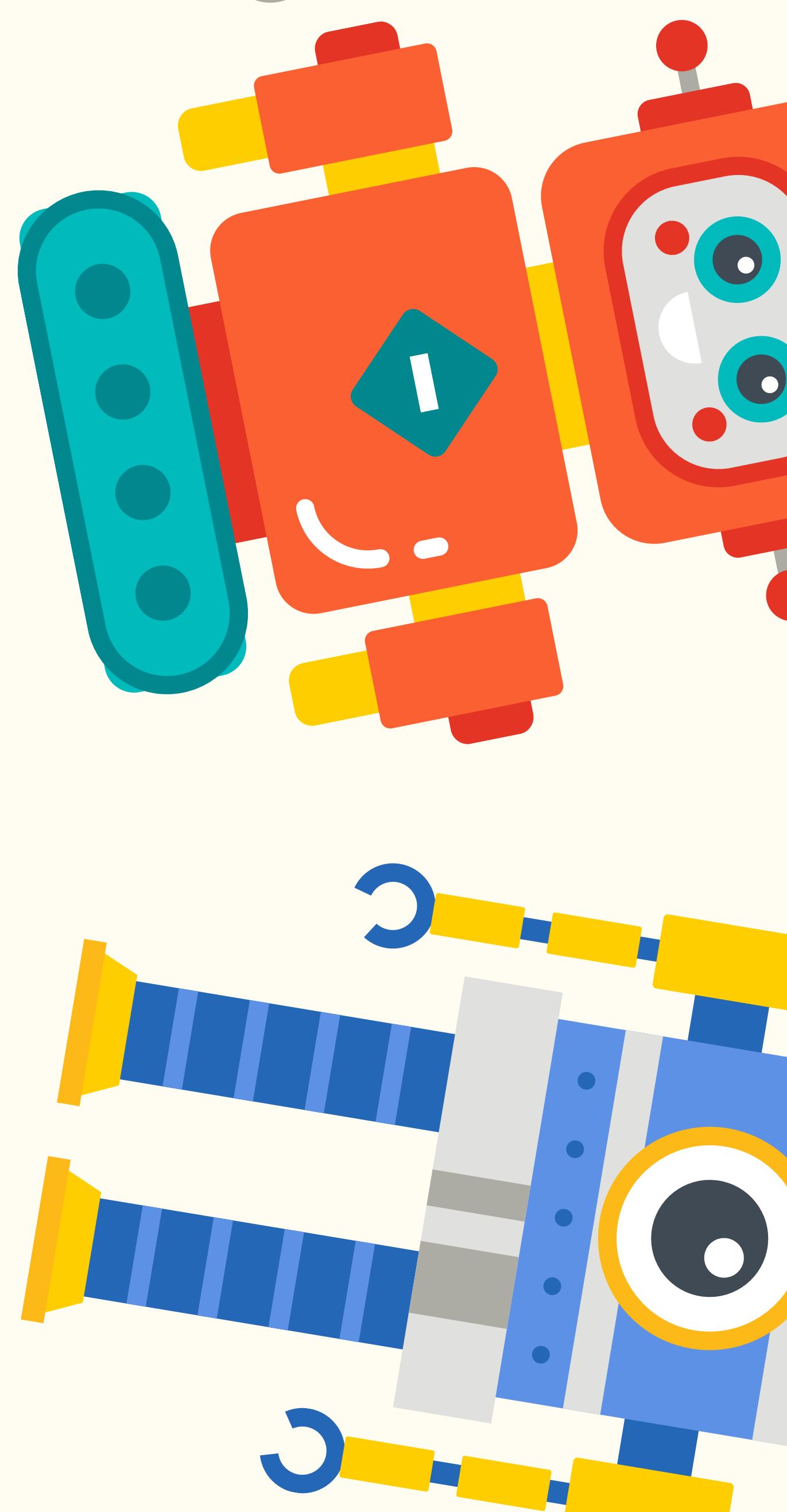
In nature, bees are one of the most important insects. Therefore, for more than 10 years, the researchers at Harvard SEAS have been working to develop RoboBees, eventually achieving the first flight in 2013. Using the same wings they use to fly in the air, the RoboBees will dive from the air, into the sea, and continue to swim underwater. Other than pollinating flowers, they may be used for a variety of applications. For ecological surveillance, biological experiments, and rescue operations, RoboBees can also be used.

Sofi

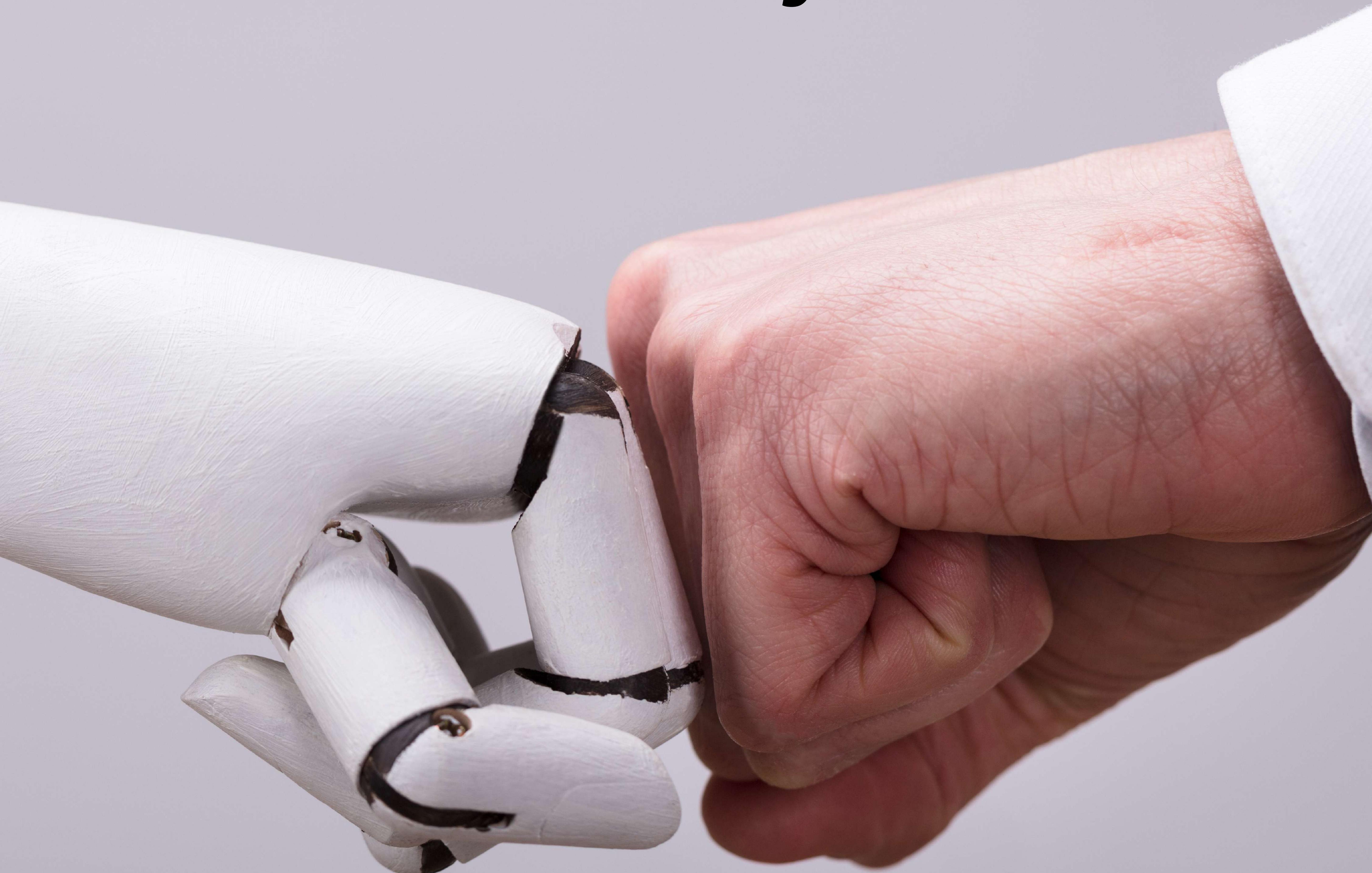
Built by MIT engineers, a robotic fish named SoFi does a really good job of looking like yet another fish in the ocean. Its rippling motion looks just like another fish, and the controller is a waterproof Super Nintendo remote that controls it, just like playing video games. On board, there is a light control unit that can change the air flow to allow the fish to rise or dive quickly. The outcome is a robot which, for longer periods of time, can travel in all directions in the ocean.

BionicKangaroo

For the past few years, Festo has been building secretly on their most innovative bio-inspired robot, yet invincible hopping robotic kangaroo, in their massive German laboratory den. It can mimic the hopping behavior of real kangaroos in a practical way, which ensures that it can regain energy effectively from one leap to help it make another hop. The actual kangaroos would get very tired easily without this skill, but by using their tendons like elastic strings, the animals can attach easily for considerable periods of time at high velocities.



Will robots take over the world one day?



As exciting as AI-powered helpers like robots are, according to Citrix's Work 2035 study, the answer is a resounding no. Robots and advanced technologies like artificial intelligence and machine learning will not replace humans.

Rather, robots will serve as everyday partners in crime, making working with these high-tech solutions more of a collaboration than a takeover. In fact, robots are expected to make us smarter, more productive and increasingly efficient.

Moreover, robots can help make the work of myriad professionals and industries simpler, faster and more cost-efficient. In fact, today's most advanced robots can do everything from sprint through rugged terrain, capturing data and information, to patrol for criminals like police dogs made of metal.

Robots may soon play very prominent roles as household helpers, co-workers and even public security and education providers.

At the moment, the world's most advanced robot appears to be a realistic humanoid known as Ameca, which can blink its eyes, smile and mimic human expression and interaction. Going forward, humans will continue to deploy humanlike robots in increasing numbers and with increasingly realistic stylings, though we're still many years away from those that will be indistinguishable from real people.



Rudra
Mehta



PHOTO WALL





VOLUME 2 - AY 2022-23
COMING SOON

