INDIA STEM ALLIANCE

TPCRA WORLD
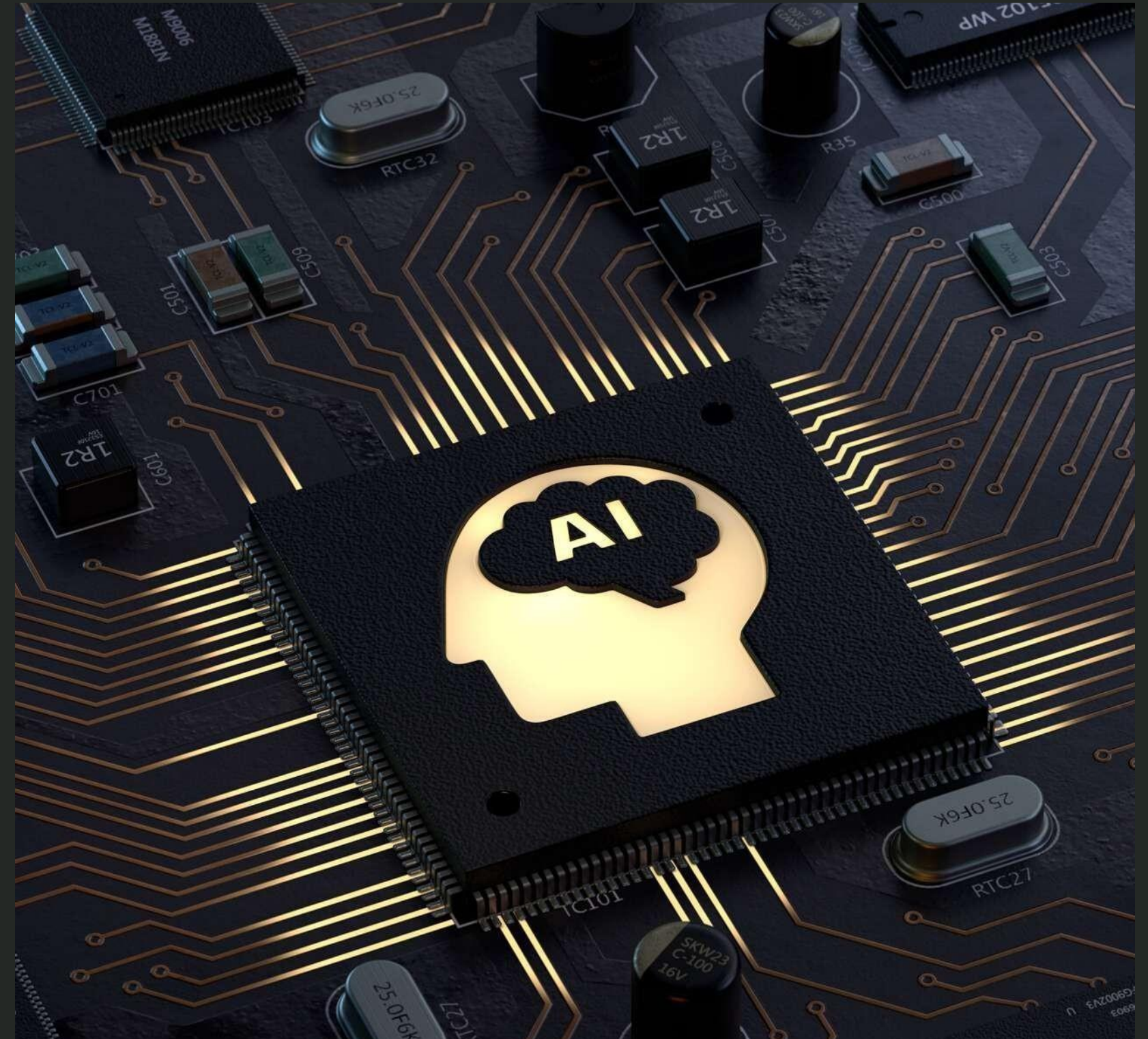Blockchain & Emerging Technology Promotion Council of Robotics & Automation

STEM SOLUTIONS FOR UNIVERSITIES

CENTRES OF EXCELLENCE

ARTIFICIAL INTELLIGENCE

The COE enlighten the students with knowledge base in Data Structures, Computer Networks, Compiler Design & its application in Problem solving using advance tools and Techniques. Students are offered access to both offline and online services.

Artificial Intelligence Lab provides a wide approach in programming and enables to apply knowledge in latest computer algorithms, Compiler Design, Computer Networks, and Artificial Intelligence. Guidance is provided to the students by a team of faculty experts and lab programmer.

INTERNET OF THINGS (IOT)

The Internet of Things (IoT) lab the focus is on research and development on business-led use cases and build reusable assets in the IoT space.

We simulate, design, develop and test industrial use cases that include the Operational Technology (OT) component, Information Technology (IT) component, security and visualisation.Our capabilities of OT include Supervisory Control And Data Acquisition (SCADA), Programmable Logic Controller (PLC), Human Machine Interface (HMI) technologies, Radio Frequency Identification (RFID) technology, camera-based image identification, analysis and Optical Character Recognition (OCR), industrial sensors, and support the standard integration and communication protocols for industrial automation.

TELECOMMUNICATION

The purpose of the Telecommunication Lab is primarily to offer hands-on experience to students for training and research by providing them scope for practical demonstrations and enabling exercises for courses in communications. This lab is equipped with electronic test equipment used to support Communication Systems by using different analog and digital communication trainers such as AM & FM Transmitters & Receivers, ASK, FSK & PSK Modulation & Demodulation.

The lab also contains microwave trainers, DSP trainers, cellular mobile trainers, analog communication trainers, PCM switching system, digital communication trainers and optical fiber communication trainers.
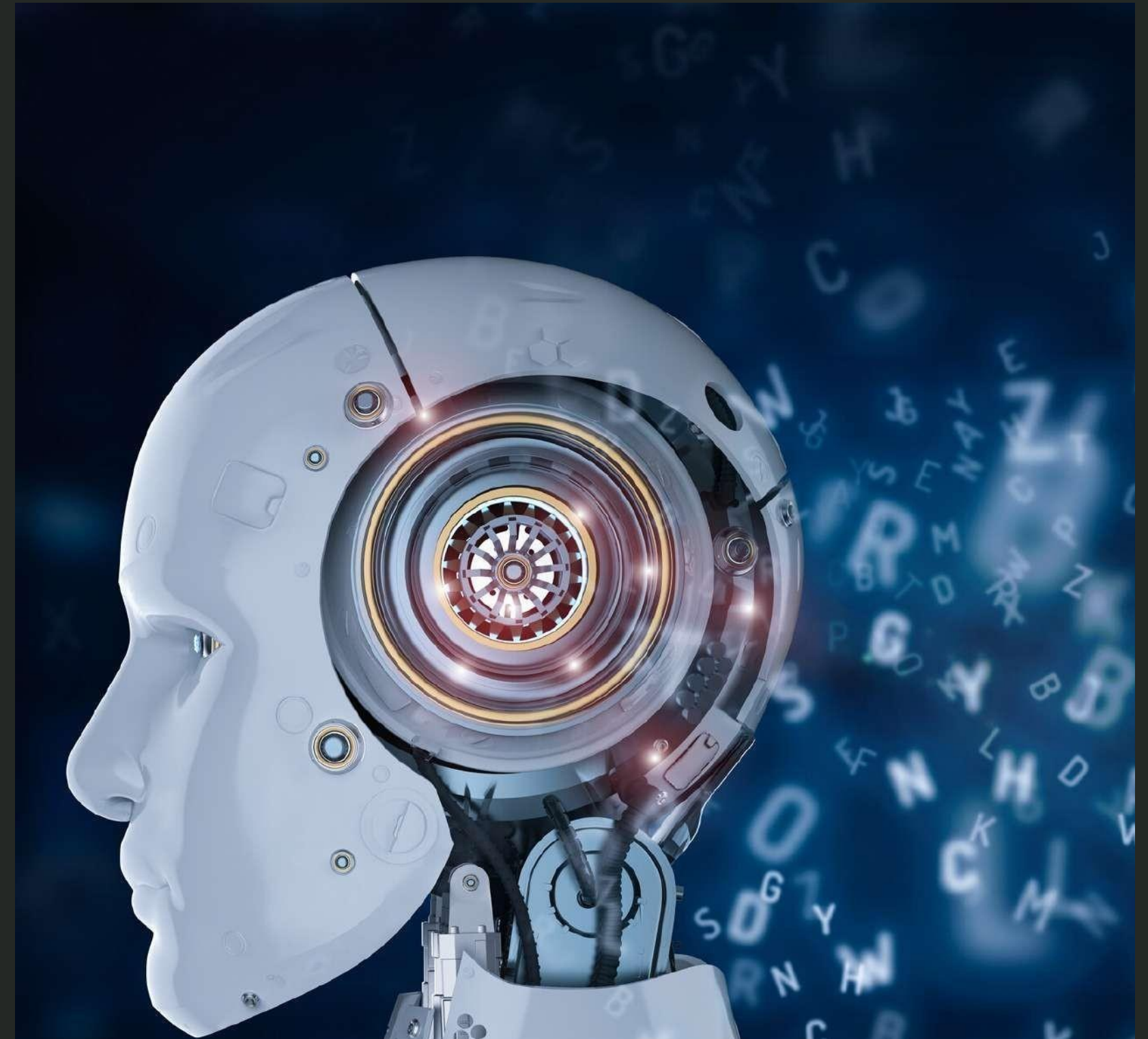
ROBOTICS

The robotics Lab is focused on interdisciplinary research applied to the state of the art autonomous intelligent robotics and human-robot interaction.

The research includes cross-disciplinary investigations in several areas such as biologically inspired algorithms, evolutionary algorithms, swarm intelligence, psychology, machine learning, data mining, computational neuroscience and cognitive science, among others.
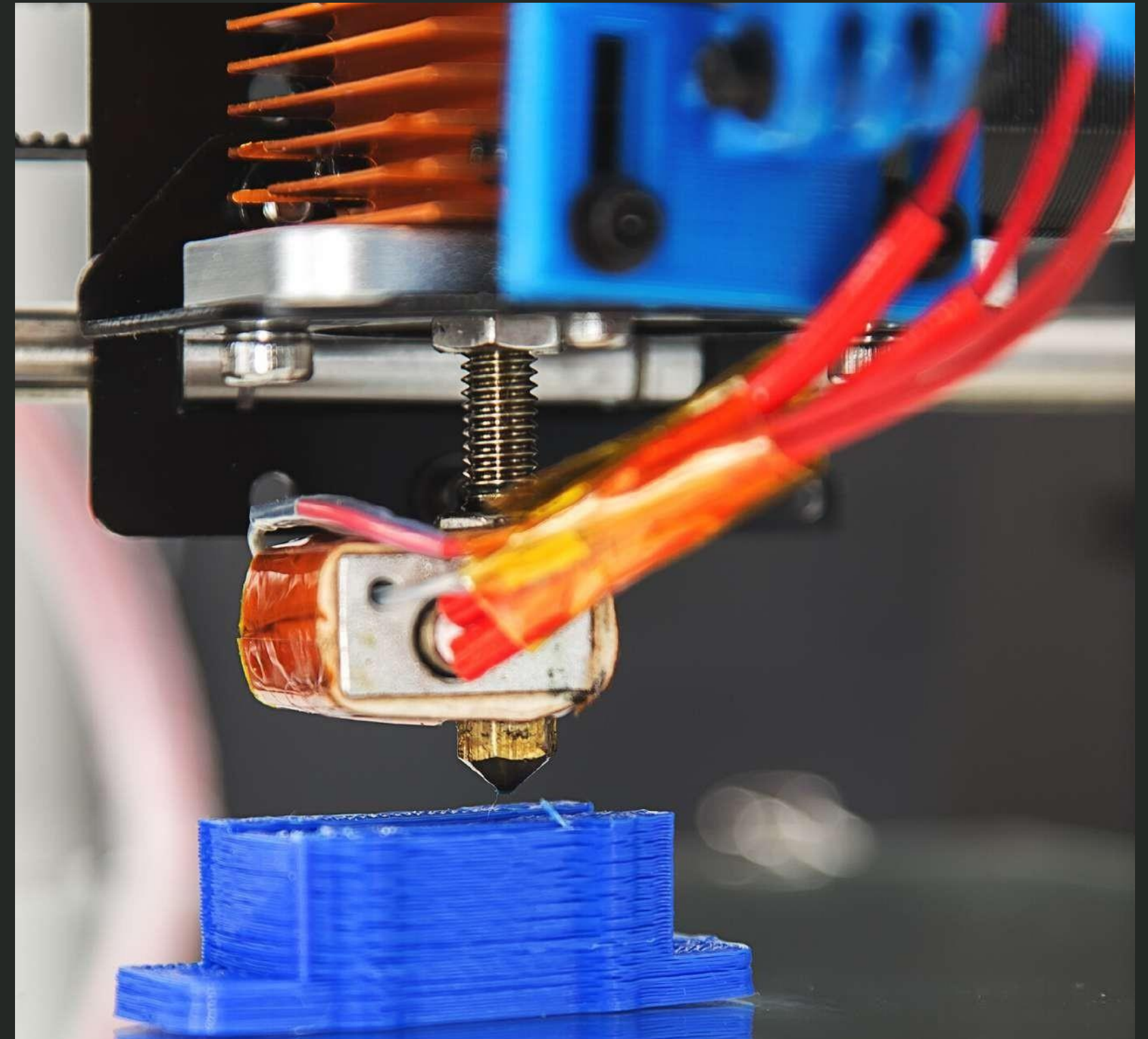
3D LABS

The 3D Print Lab is where students can come to submit 3D prints, 3D model, and 3D scan. This Lab will host several 3D printers and 3D scanners including a 3D Systems Sense scanner and a FAROArm Edge.

computers would be for designing including Windows machines, and Macs. These computers host many 3D design software options, including SolidWorks, Blender, MeshMixer, MeshLab, CloudCompare, Sculptris, ZBrush, Sketchup, Slicer, and more.

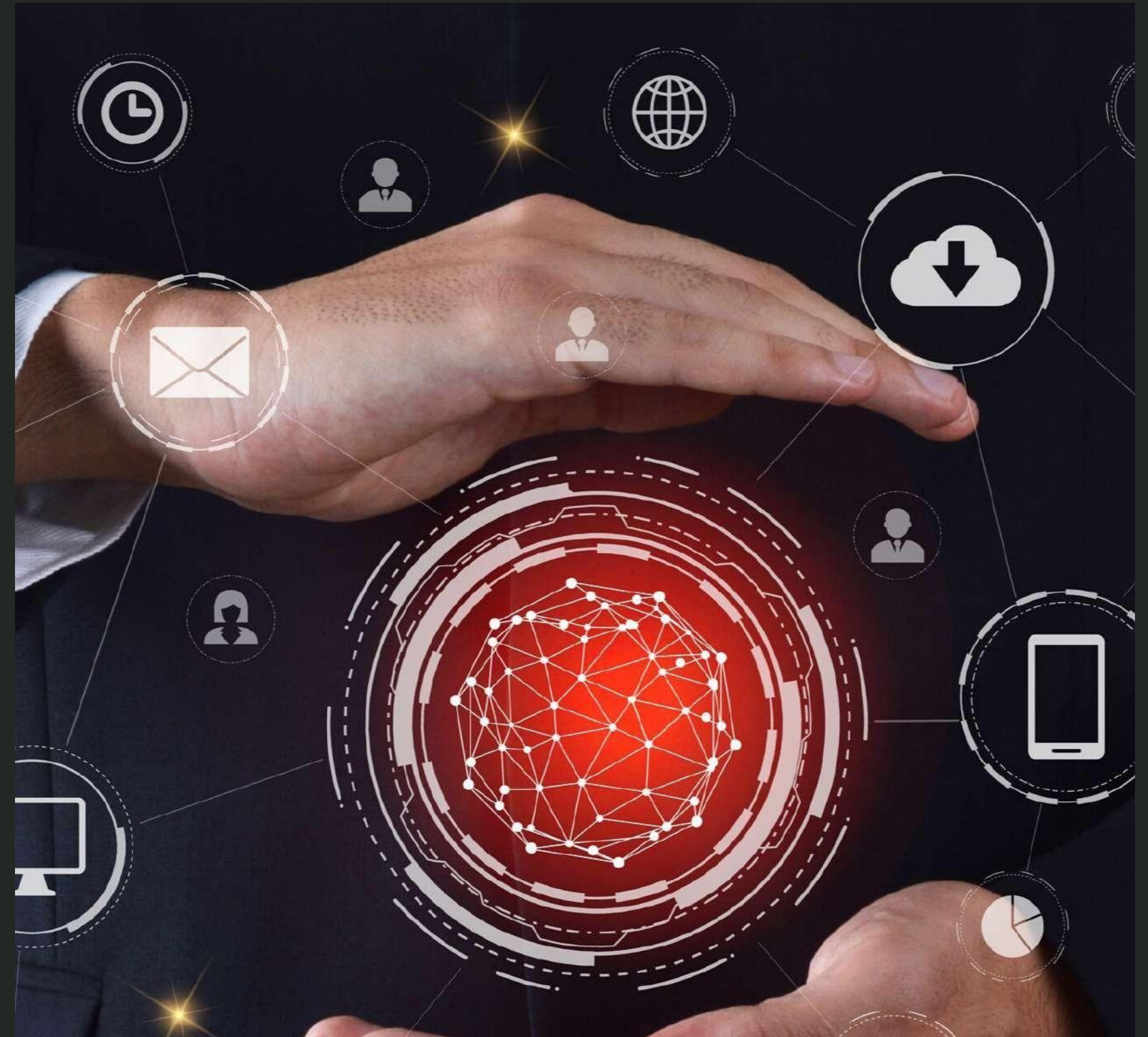We will deploy several slicing options including Simplify3D, Makerbot Desktop, Matter Control, and Cura.

BIG DATA LABS

The Big Data Analytics Lab are interdisciplinary research labs that focuses on large-scale data analytics problems that arise in different application domains and disciplines.

One of the primary focus of our lab is to investigate an alternative computational paradigm that involves "humans-in-the-loop" for large-scale analytics problems.

These problems arise at different stages in a traditional data science pipeline (e.g., data cleaning, query answering, ad-hoc data exploration, or predictive modeling), as well as from emerging applications

RFID LABS

As radio frequency identification (RFID) technology expands and improves, researchers should be advancing with it.

The RFID Center of Excellence swill serve as an international resource to academics and members of the business community.

AR/VR LABS

Virtual Reality Labs serves as a research and testing grounds for faculty and students interested in exploring the educational potential of existing VR experiences, or in developing and testing their own VR content.

Programs in 3D computer vision and perception, object recognition, graphics, game science and education, distributed computing, stream processing, databases and computer architecture, and privacy and security.
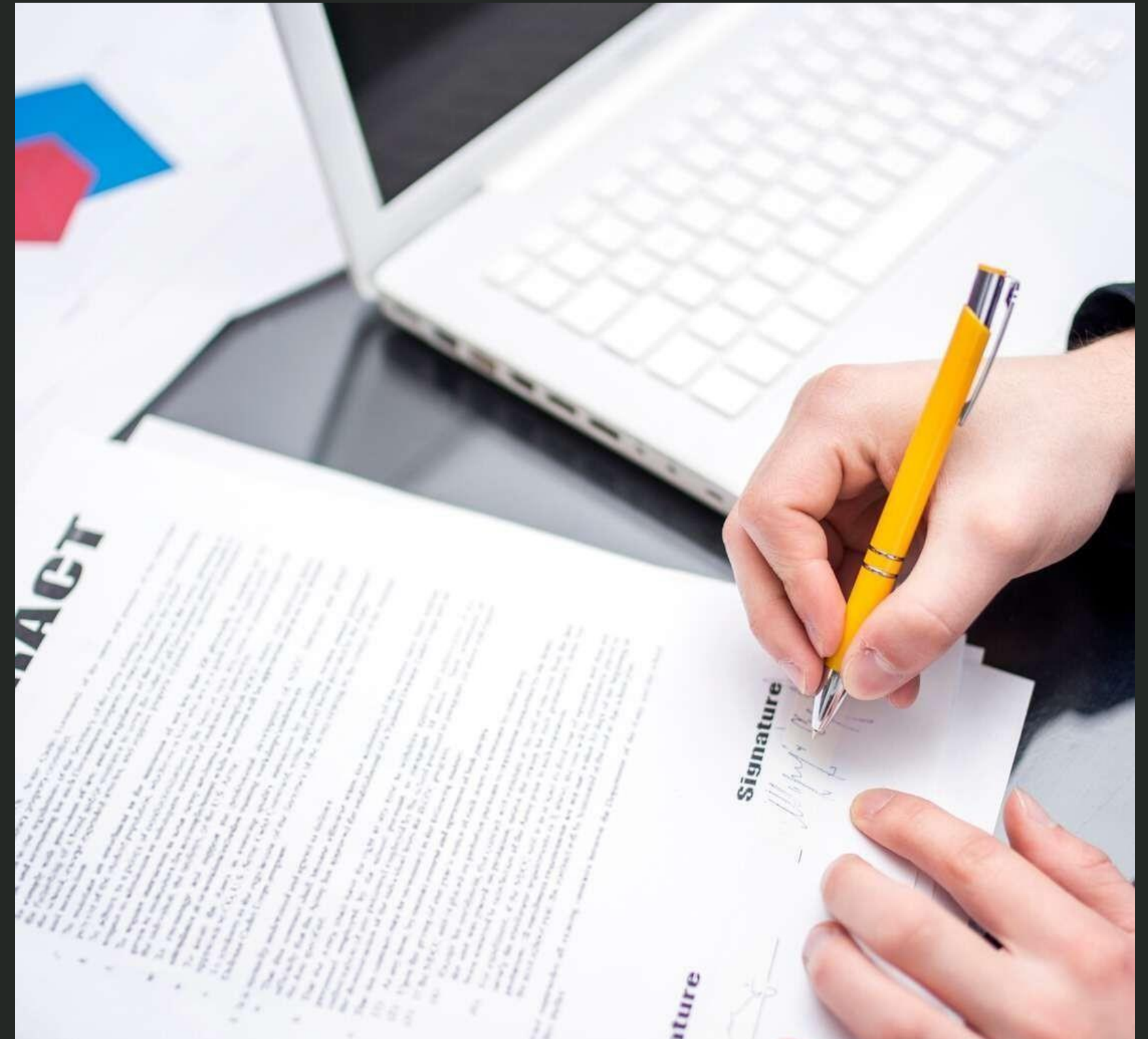

VEATIVE

UNIVERSITY PARTNERSHIPS

We integrate our industry expertise with market research experience to assist corporate houses and foreign universities in identifying best fir academic partners.

We evaluate and identify the best options, provide strategic advice, make recommendations on competitive positioning and consult on how to deal with potential barriers to partnerships or synergy.

We assist in building deeply embedded partnerships that enable universities to achieve their internationalization ambitions.

GL BAL
PARTNERSHIPS

GLOBAL IMMERSION PROGRAMME

The Global Immersion Programme (GIP) helps university graduates experience, learn and explore global career benchmarks with two of the WORLD'S TOP 15 UNIVERSITIES and INDUSTRY EXPERTS from leading MNCs.

Participants complete a course elective at Nanyang Technological University (NTU), Singapore, learn from and interact with subject matter experts and gain invaluable hands-on experience. Industry visits and interaction are an integral part of the course work.

THE BIG IDEA PROJECT

This project offers extracurricular projects to students with year-long mentoring on projects as well as on career and educational counseling. The project fee varies based on school's expectations.

As a standard model, we could support all of the college's interested students providing them project ideas, support, internship, and one-to-one mentoring. Each student will finish at least two projects.

Big Idea. PROJECT

THE BIG IDEA PROJECT INTERNATIONAL TOURS

The Big Idea Student Tours create, develop and support the idea of experiential learning through interdisciplinary engagements and actions.

Open for all students, these international tours are focused on ideation, engagements, and rigour to offer pre-departure mentoring –international networking, and institutional branding. The program travels to countries like the United States, the United Kingdom,Singapore, Canada, Spain, Australia, and Europe.

THE GLOBAL EDUCATOR PROGRAM

The Global Educator Program (TGEP) offers global learning and professional development opportunities for high school counselors to travel the world on a fully-funded or mostly-funded program.

The program provides excellent networking opportunities, conferences, and deep-dive discussions and workshops in a truly immersive global experience.

Global Education Project

TEACH ABROAD PROGRAM

his is a certified training program to help qualified teachers to teach full- t ime in the US. The training includes inputs on teaching methods, classroom culture and pedagogies in the US.

It also includes inputs on job applications and support in placements.. Training inputs are delivered online (group) with one-on-one mentoring by our American trainers.

Because the success of the program depends o n successful placements, w e select the program's cohort very carefully to include only the high-potential applicants w h o could be t rained in 6 months to teach in the US

teachaway

GLOBAL INTERNSHIP PROGRAM

The Global Interns Program allows students enrolled in college to do full-time internships in the US, Canada, and Europe. The program provides group housing with kitchen and wifi, placement at firms matching the applicant's strengths and interests, mid-term reviews to make sure that applicants and firms are both optimizing their professional relationship, 24*7 emergency services, professional development support, intercultural training, and other necessary local support.

The 3-month program provides college students a window of opportunities to learn in a global environment and make life-long professional relationships with potentially high-yield future rewards.

GLOBAL INTERNSHIP PROGRAM

EDTREK

Students engage in sessions led by carefully selected resource persons to discuss topics such as exploring college options, problem-solving, reading habits, pursuing global citizenry and the like.

EdTrek is a model for youth empowerment and development offering robust marketing outreach for colleges like yours. The bus routes and stops are predetermined typically in and around campuses and youth recreation spaces to maximize outdoor visibility.

EdTrek also provides brand traction through social media, press, audio-visual content and live streaming technology.

EdTrek
Journeys in Learning

OTHER SERVICES

- STEM Teacher Training
- STEM Curriculum Development
- STEM Competitions & Challenges
- STEM Events
- STEM Ignite Talks
- STEM Faculty Facilitation
- STEM Advisory Board Formation
- STEM Insights
- International Faculty facilitation
- International Partnerships, Research & Collaboration options
- Perception Management for Universities
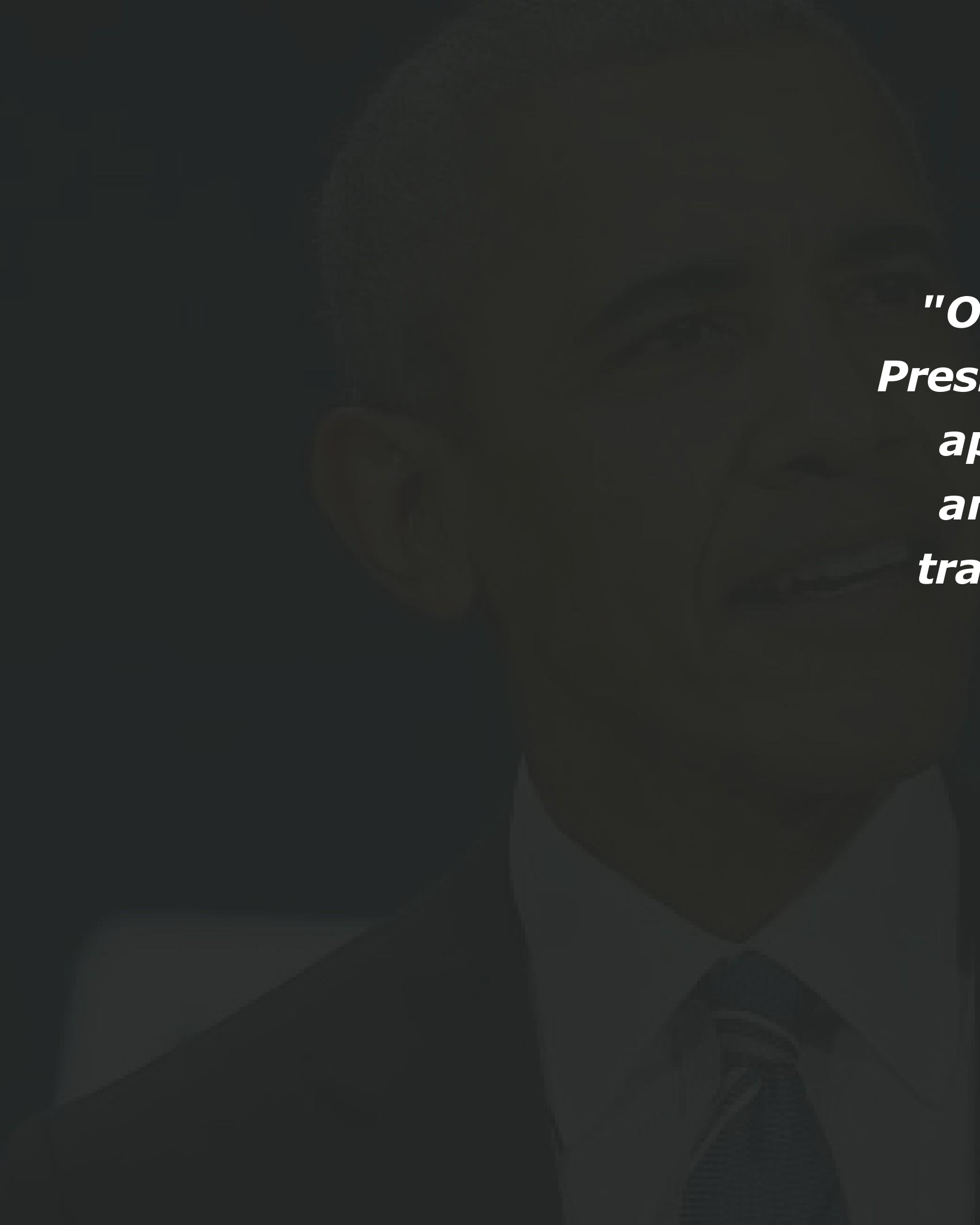- Global Rankings Program

ie Reinventing Higher Education

STEM CERTIFICATIONS

Our STEM Educational Research™'s trustmarks have been extensively and continuously used, marketed, advertised and promoted globally acquiring distinctiveness and secondary meaning since early 2012.

We benchmark STEM best practices in the following:

- STEM Curriculum
- STEM Teachers
- STEM Products & Solutions
- STEM Software
- STEM Impavt
- STEM Facilitators
- STEM Labs

"One of the things that I've been focused on as President is how we create an all-hands-on-deck approach to science, technology, engineering, and math... We need to make this a priority to train an army of new teachers in these subject areas, and to make sure that all of us as a country are lifting up these subjects for the respect that they deserve "

~Barack Obama.

Coming Soon

STEMZON
India's first and
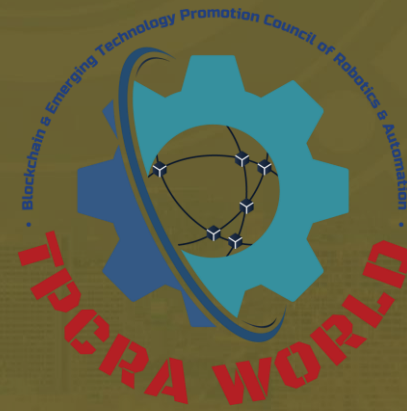dedicated STEM Portal

INDIA
STEM
ALLIANCE

STEM INDIA
India's First dedicated
STEM Magazine

TPCRA WORLD

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