

FOR KIDS

The Vision For Future

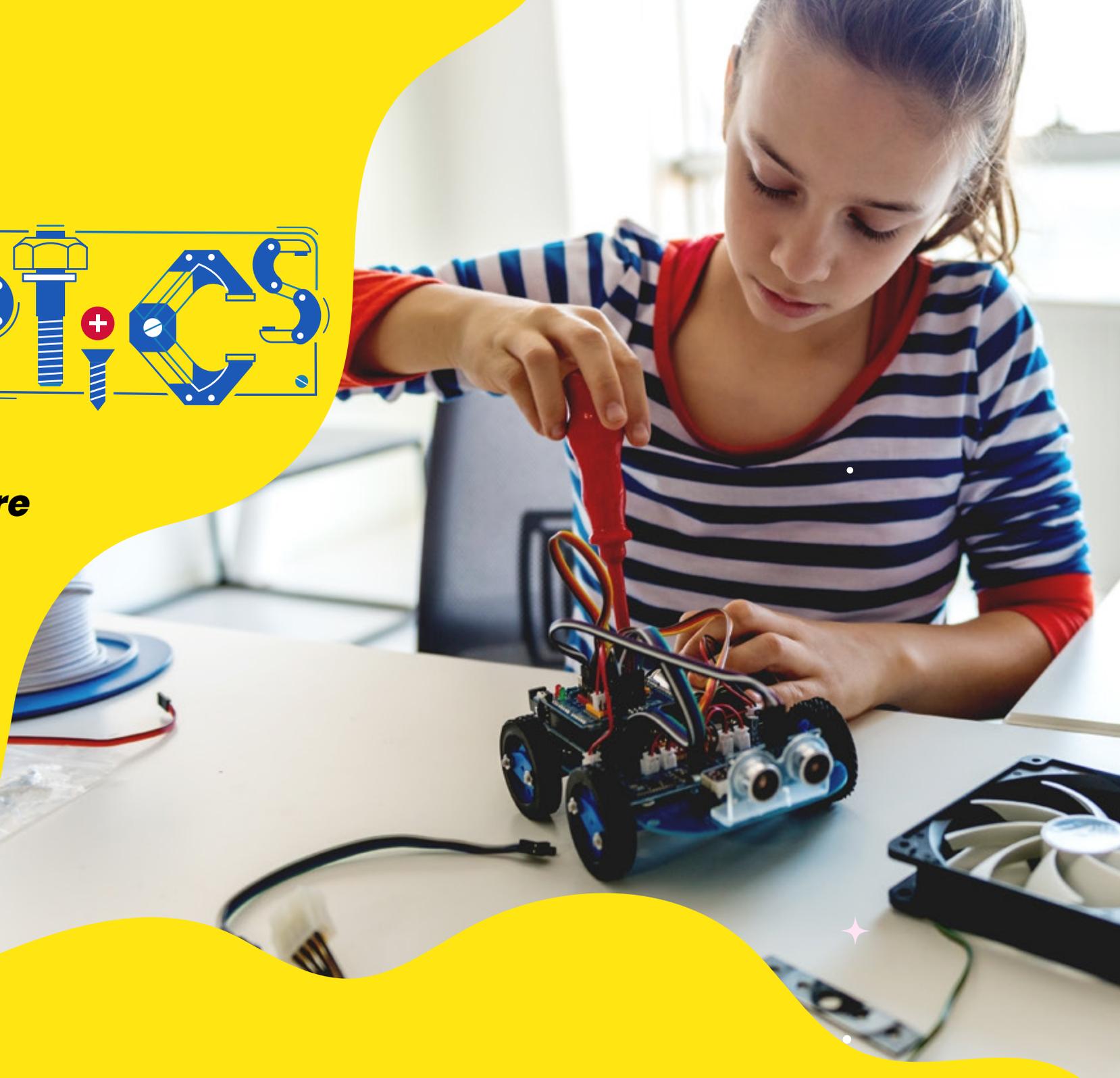


TABLE OF CONTENTS

CHAPTER 1

Future of Jobs and Robotics

CHAPTER 2

How to Strikethrough College Admissions

CHAPTER 3

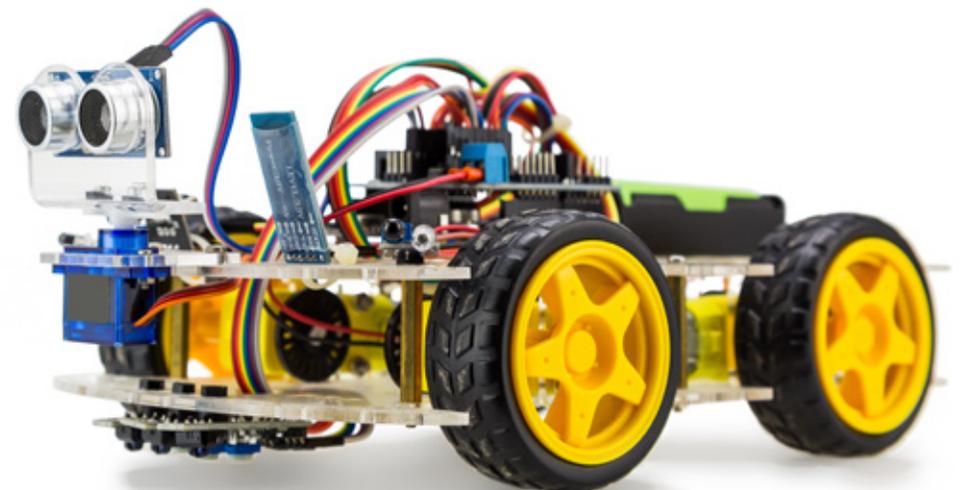
Robotics - Ruling the World

CHAPTER 4

Futuristic Learning for Robotics

CHAPTER 5

3-steps Video Series on Robotics





CHAPTER 1

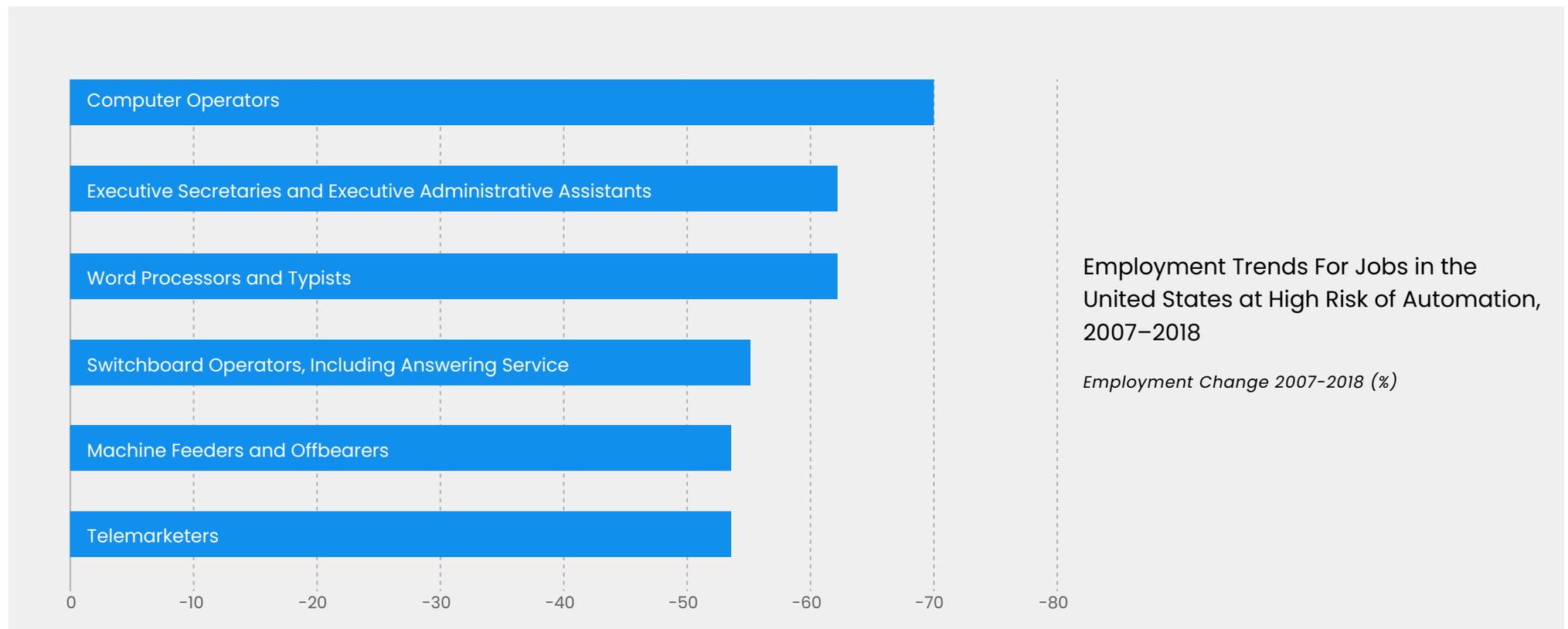
Future of Jobs and Robotics

THE FUTURE OF JOBS AND HOW IT IS CHANGING RAPIDLY

“About 97.3 million individuals or roughly 15% of the workforce in the 35 countries are at high risk of being furloughed or made redundant.” – [According to IMF’s Analysis](#)

Some of the jolting trends according to the Future of Jobs 2020 Survey:

- Computer Operators, Executive Secretaries and Executive Administrative Assistants Word Processors and Typists, Switchboard Operators, Including Answering Service, and related jobs are at 50-70% risk of automation



- In the 2nd quarter of 2020, **unemployment in the United States increased by 8.5 points**, in Australia, it increased by 1.5 points, and in Canada, it increased by 6 points
 - More than 30% of the businesses worldwide are accelerating the digitalization of work processes, automation of tasks, digitalization of upskilling/reskilling, and implementation of upskilling/reskilling programs.
 - About **85 million jobs will be displaced by robots** by 2025
-

In the past two decades, the world witnessed ground-breaking, emerging technologies. But in the last 1.5 years (2019–mid 2020), the world witnessed a rapid acceleration in the adoption of new technologies. In the manufacturing industry, close to **20 million jobs** across the world are expected to be replaced by the next decade. In the span of the last two decades, robots in the world multiplied three times and reached 2.25 million. By 2030, **the world is expected to be home to 20 million robots**. Imagine a rapidly rising population and a brigade of robots replacing humans.

Currently, we are standing across Fourth Industrial Revolution. By 2025, the capabilities of machines and algorithms will be more broadly employed. Worldwide, an average of **15% of the workforce is at risk of disruption by 2025**. Close to 6% of workers are expected to be fully displaced by the same time. Cloud computing, robots, non-humanoid (e.g industrial automation, drones), and the Internet of things and connected devices are here to replace the warm human touch from the world of business.

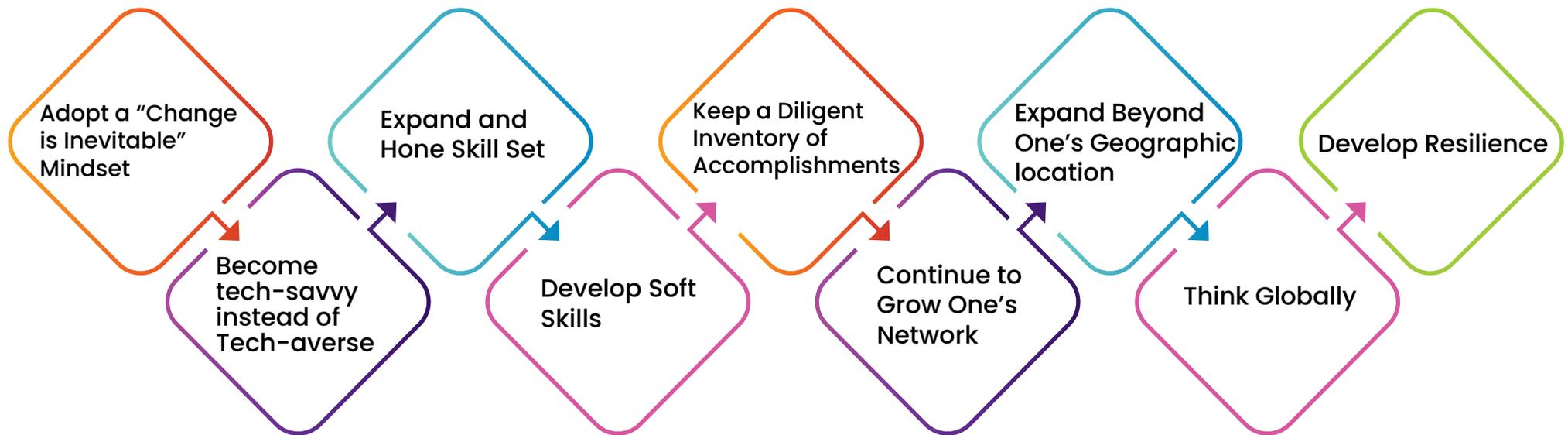
Innovator Program prepares every child for the future of work.
Book a Free Trial to shield your child's future.

BOOK A FREE TRIAL

HOW TO SURVIVE THE CHANGE?

“How to future-proof your child’s career?” – a million-dollar question in a gig economy burdened by rapid technological advances. In a few words, the answer is simple yet challenging- **Never Stop Grooming!**

LET US LOOK AT WHAT THE INDUSTRY EXPERTS SUGGEST:



Your child can try these 9 methods to up the game or can put their future career into the top gear and lead.

Here is what you, as a parent, need to do:



FIND YOUR PASSION AND WORK ON IT

Will do wonders if your kids know what drives them



EXPAND HORIZON WITH THE ROOT OF TECHNOLOGY

Dig deeper and learn how things work



DEVELOP AN INNOVATOR MINDSET

Be a creator rather than be a consumer



GO BEYOND THE CLASSROOM

Learn something futuristic

FIND YOUR PASSION AND WORK ON IT – An old-school technique but will do wonders if your kids know what drives them. At the age of 13, **Sania Jain** created [Sania Box embedded computer kit](#) for kids to introduce coding from an early age.

EXPAND HORIZON WITH THE ROOT OF TECHNOLOGY – Surfing the internet or ordering food through Alexa is easy. Encourage your child to dig deeper and learn how things work. Start with programming and experimenting.

DEVELOP AN INNOVATOR MINDSET – Challenge your child to be a creator rather than be a consumer. Begin by experimenting with Arduino or Raspberry Pi boards.

GO BEYOND THE CLASSROOM – Imbibe bookish knowledge but for a bright future, learn something futuristic like robotics, home automation, app development etc.

IF YOUR CHILD STARTS AT AN EARLY AGE, THE CAREER IS GUARANTEED TO BE FUTURE-PROOF.

WHAT IS ROBOTICS? HOW WILL IT TAKE THE CENTER STAGE?

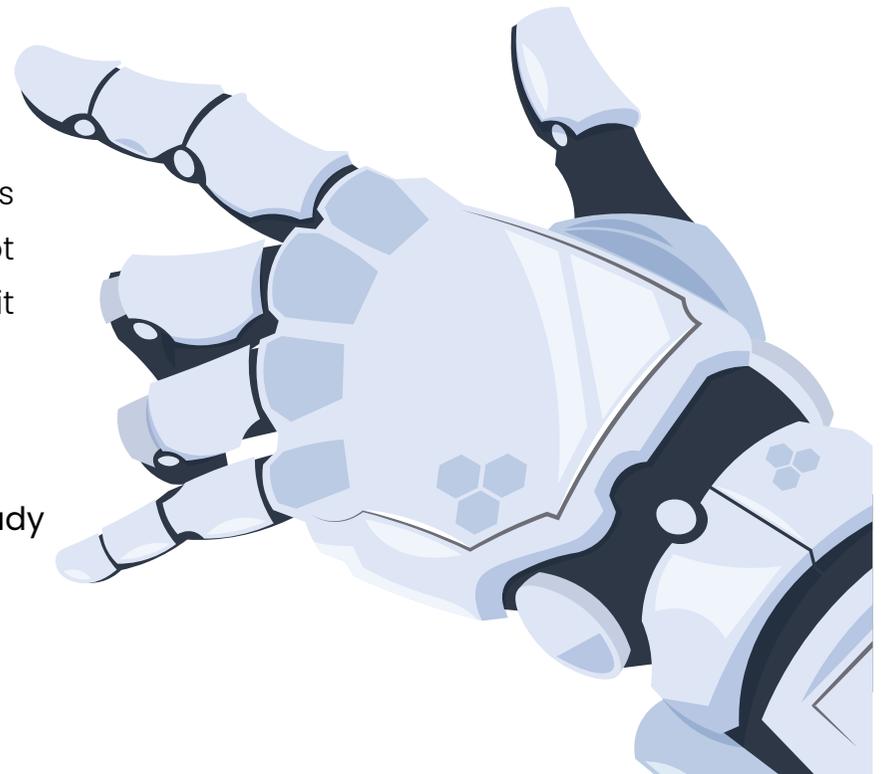
Before we jump on Robotics, it will be a good idea to understand what a robot is all about.

A 'Robot' is a combination of physical robots and virtual software agents (bots). There is no official definition for a robot but as per experts, a robot is something that can move around, operate a mechanical limb, exhibit intelligent behavior, and sense & manipulate its environment.

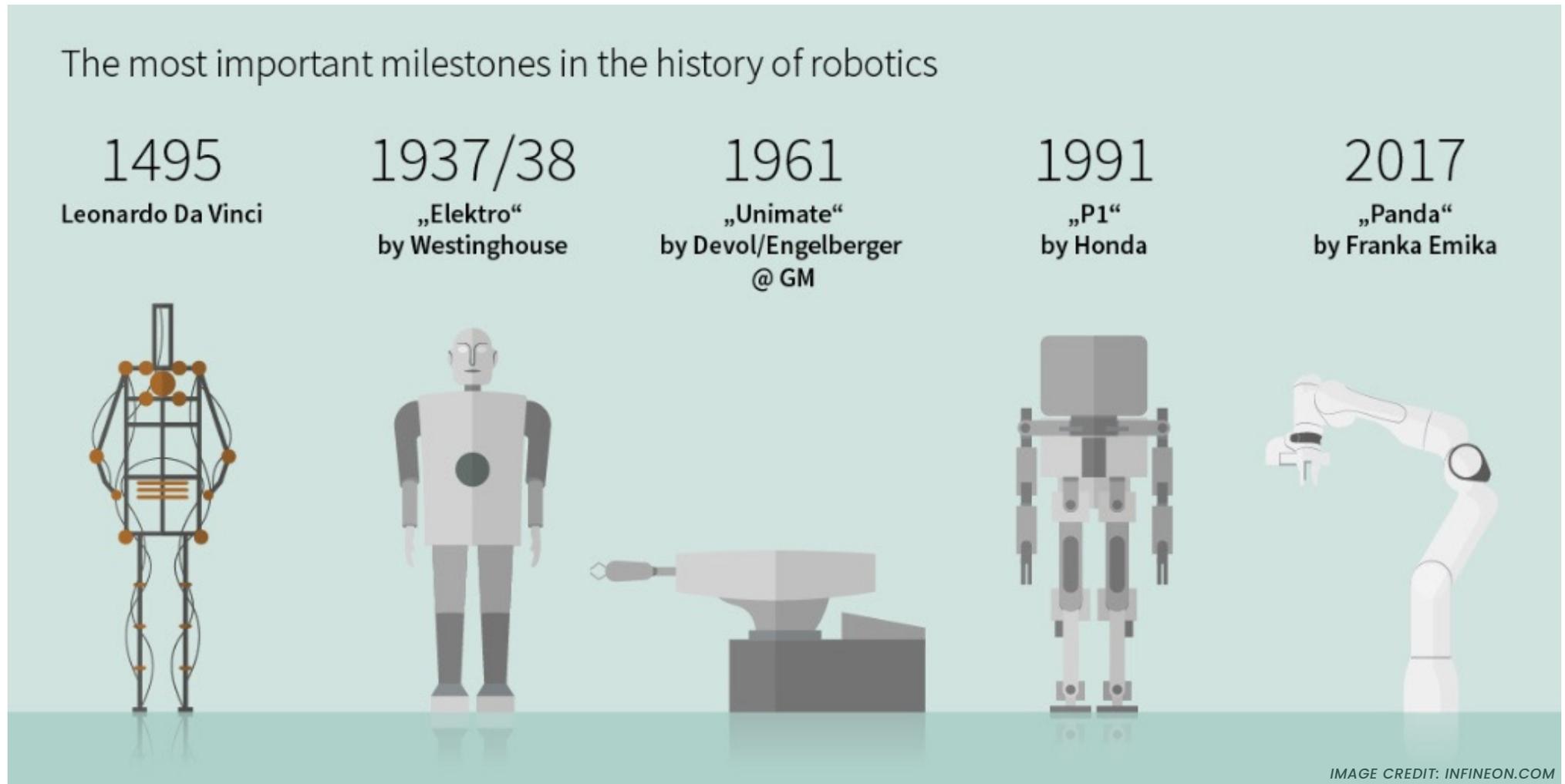
After 'Career is guaranteed to be future proof.....'

Book a Free Trial of the Innovator Program to make your child future ready

BOOK A FREE TRIAL



HERE IS THE PROGRESS OF ROBOTS:



As a sub-domain of engineering and science, 'Robotics' includes disciplines like mechanical engineering, electrical engineering, computer science, and others. The subject revolves around the design, construction, operation, and use of robots. It also introduces one to computer systems required to control, sensory feedback, and information processing.

“**DO YOU KNOW THAT A ROBOT INTERACTS WITH ITS SURROUNDINGS THROUGH SENSORS, ACTUATORS, AND INFORMATION PROCESSING UNITS?**”



*YOU CAN LEARN MORE ABOUT
THE BASICS OF ROBOTICS THROUGH*

THE ARDUINO BOARD



ROBOTICS IS THE FUTURE!

Robotics finds application in every field possible. One can find robots in **assembly lines, warehouses, hospitals, research facilities, houses, factories, agriculture,** and more.



ASSEMBLY LINE ROBOT



WAREHOUSE ROBOT



ROBOT IN HOSPITALS



RESEARCH FACILITY ROBOT



HOUSE ROBOT



AGRICULTURE HOSPITALS

Robots are ensuring Safer Workplaces

Robots increased productivity by 30% and reduced production cost by 50%

Interesting Example: In 2020, CloudMinds donated 12 robots to hospitals during the COVID-19 pandemic. The robot cleaned and disinfected areas and was responsible for sick patients.



CHAPTER 2

How to Strikethrough College Admission



WHAT COLLEGES LOOK FOR IN YOUR CHILD'S RESUME?

A striking resume for a college application is every parent's dream and every child's struggle.

Everything starts at the beginning! To ensure that your child's career is future-proof, you need to start grooming your little one at an early stage.

At the School Level, your child needs to pick subjects that will amplify your child's understanding, build up reasoning abilities, and improve problem-solving skills. Kids' focus on the following subjects and turn out to be **beneficial in the long run**:

- Mathematical Studies
- Mathematics (SL)
- Mathematics (HL)
- Computer Science
- Design Technology
- Physics
- AP 3-D Art and Design
- AP Calculus AB and AP Calculus BC
- AP Computer Science
- AP Physics 1, 2
- AP Physics C- Electricity and Magnetism





Extra-curricular activities and joining clubs will help boost up the resume further:

- **Coding Club**
- **Robotics Club**
- **Standard-Level Subject Clubs**
- **Design Club**
- **Automation Club**

Moonshot Jr envisions to prepare your kids for the future and help them build stellar resumes. Our holistic teaching approach on futuristic streams like coding, IOT, Robotics, AI, and more, through hands-on learning experience aims to make kids future-ready. We can help create a striking resume for your child in few easy steps:

Learn how to strikethrough the college admission application

BOOK A FREE TRIAL



COLLEGE ADMISSION- GET AN EARLY HEAD START

DO YOU KNOW: STEM JOBS ARE PROJECTED TO GROW 8.8%!

STEM (Science, technology, engineering, and mathematics) is the future of education as it helps children understand technology and engineering at an early stage of life.

Technology and engineering are the drivers of the future that are also important for robotics. But fewer than half of the [schools in the US](#) offer computer science classes. This is where the [Innovator Program, by Moonshot Jr](#), steps in and proves its importance.

Other than STEM, you as a parent need to do the following:

Problem Solving: Introduce problem-solving to your child's daily routine to help them understand scientific principles in the process.

Invention-based Learning: Introduce your kid to [DIY kits or boards](#) to help them get a feel about the workings of technology. This will encourage them to create and experiment on their own.

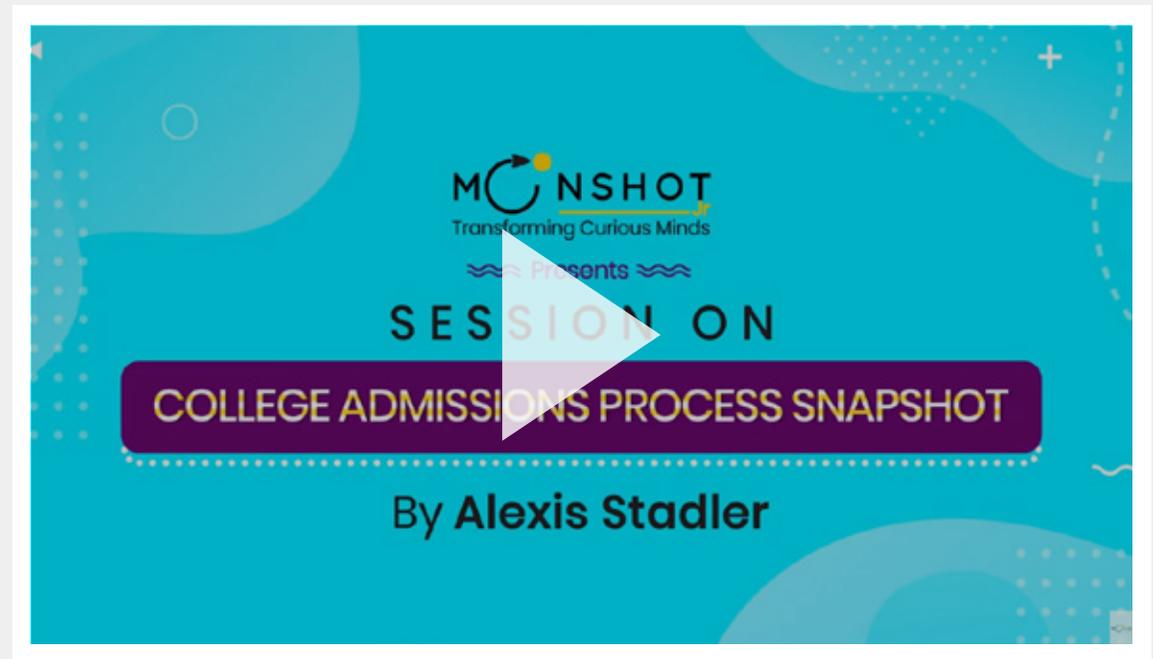
Encourage Free Play: Creativity and imagination are the roots of free play. Both are important for developing problem-solving ability. As per the American Academy of Pediatrics, *"play can foster creativity and imagination, as well as dexterity and physical, cognitive, and emotional strength."*



Encourage Inquisitiveness: Let your child ask questions freely to help them understand various scenarios in detail. Never restrain them from harboring knowledge and encourage them to look at situations from various angles.

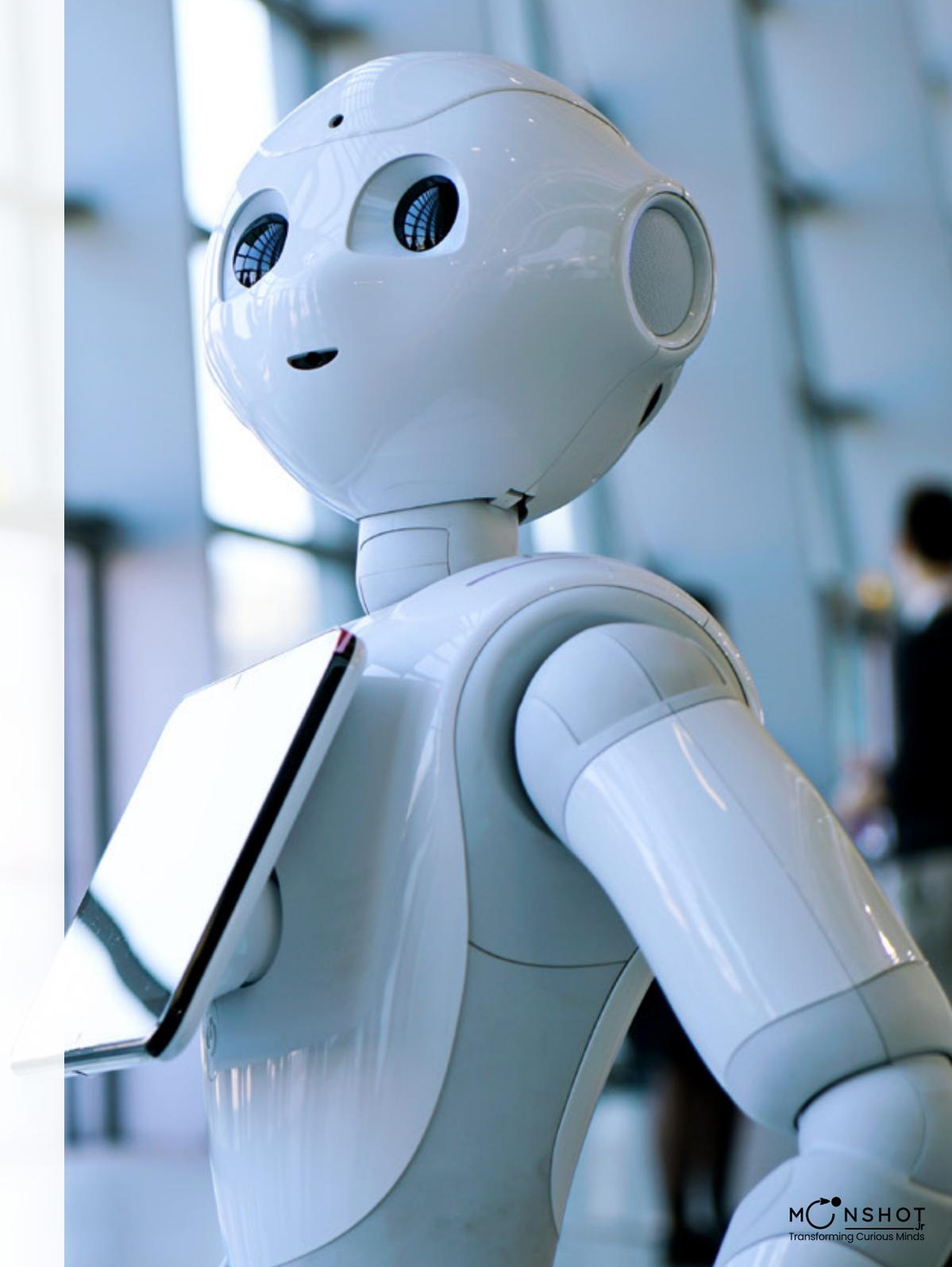
Not only Moonshot Jr can help nurture the resume of your child, through the Innovator Program, but can also introduce you to the subject-matter experts, who can be a great value-addition.

*LET'S HEAR MORE ON COLLEGE
ADMISSION PROCESS FROM ONE
OF THOSE SUBJECT-MATTER
EXPERTS AT MOONSHOT JR*



CHAPTER 3

Robotics – Ruling the World



HOW ARE ROBOTICS AND AUTOMATION CHANGING THE WORLD AS WE KNOW IT?

Robots are everywhere- from movies to factories! Robotics has a wide application, and it is changing the way we perceive the future. On a global level, the robot density has increased by many folds. Currently, there are 74 units per 10,000 employees. The average robot density in Europe is 99, in the US it is 84, and in Asia, it is 63.

Current applications of Robotics:

Industrial robots: In an industrial environment, industrial robots are used to handle, assemble, or process workpieces.

Service robots: Vacuum cleaner and lawnmower robots are classified as service robots as these provide services to humans.

Cobots: A very fresh concept where robots work together with humans in production processes and don't replace humans in any sense. Air France has employed Air-Cobots for human-bot inspection of the airplane.

Autonomous Mobile Robots (AMRs): AMRs are robots that can move through their environment without an operator. MER rovers on Mars are the best example of AMRs.



SPYCE RESTAURANT, BOSTON, US

EXAMPLE OF AUTONOMOUS ROBOTS



Mars Rover



Warehouse Robots

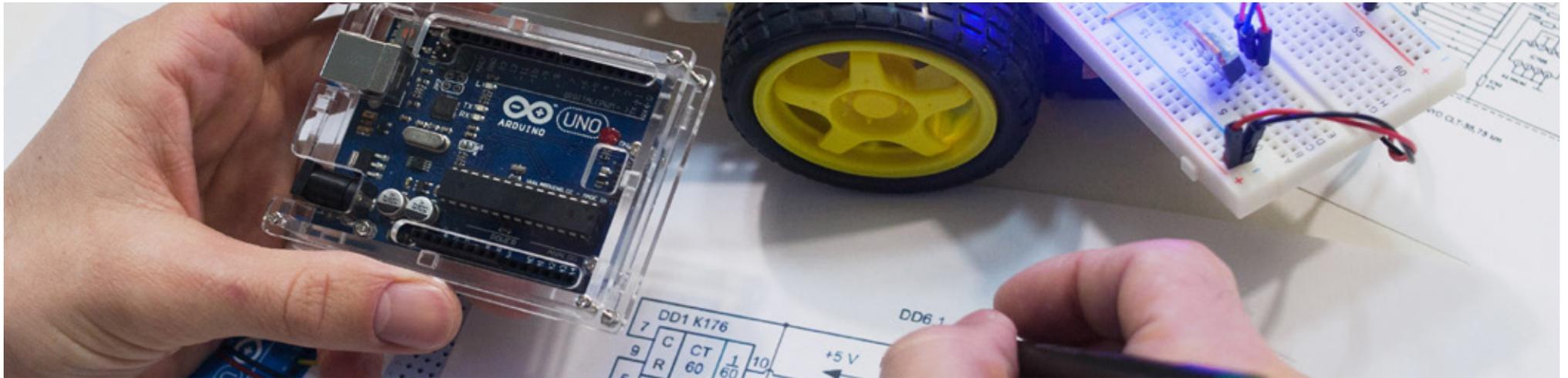
ROBOTICS AND AUTOMATION ARE CHANGING THE FACE OF THE WORLD

Automation combined with Artificial Intelligence and the Internet of Things is all around now. Look at the smart speakers that can be used to control the heat around the house or the coffee maker that can be programmed through a phone. Home automation is here and going to stay for long. Automation and robotics will lead to the following:

- Increased Security
- Improve the lives of people with reduced mobility
- Resource Saving
- Make everyday life and buildings smarter

AUTOMATION AND ARDUINO

Automation requires an Arduino board that is a popular open-source electronics platform. It is a combination of hardware and software. There are various types of Arduino boards available such as [Arduino Uno](#), Arduino Mega, Arduino Nano, Arduino Pro Mini, and more. It is a small board, which is fully assembled with an AVR microcontroller and is well-suited for interacting with an environment. Many things that are hard with microcontrollers are rather easy with Arduino.



POSSIBLE APPLICATION OF ROBOTICS IN THE FUTURE

Robotics will continue to transform lives. Here are the trends in robotic automation for the near future:

- **Industrial Internet of Things (IIoT) Technology**

Integration of smart sensors across production and various fields will increase the capacity of robots to collect data and improve efficiency. Here, Robotics and Programming will play a lead role.

- **Industrial Cybersecurity**

As the robots move forward, the cybersecurity risks increase. Addressing vulnerabilities will become a priority. Here, Programming will play a lead role.

- **Implementation of Open Automation Architectures**

Open automation architectures will grow to produce standards and open documentation that will make robotic integration easier.

- **Collaborative Robots Will Continue to Grow in Popularity**

The strength of [collaborative robots](#) or Cobots alongside humans will grow as these become more capable in tough industrial settings.

**AVAIL A FREE
ARDUINO UNO KIT WITH
THE TRIAL CLASS.**

BOOK NOW



CHAPTER 4

Futuristic Learning for Robotics



IMPORTANCE OF HANDS-ON LEARNING WITH ROBOTICS KITS

In hands-on learning, students get involved with the subject matter at the root level and learn to solve a problem or create something. Hands-on learning is best suited for robotics as a child gets to experience the science behind the workings on the first-hand basis.

Hands of learning in robotics is important because:

- An engaging way to learn
- Increases retention powerility
- Boosts problem solving and critical thinking
- Results in a physical creation
- Helps understand circuits or working machines
- Helps recreate projects that enhance the learning experience
- Expands knowledge base on various levels

As a parent, you can encourage hands-on activities at home. This will help your child undertake projects and innovate while expanding the learning horizon.



AT MOONSHOT JUNIOR, OUR EXPERIENCED TEACHING STAFF GUIDES CHILDREN THROUGH FUTURISTIC STREAMS IN A FUN MANNER WHILE CHALLENGING THEIR INTELLECT.

MOONSHOT JR INCLUDES LEARNING KITS IN THE CURRICULUM TO HELP CHILDREN LEARN WHILE BEING CREATIVE:



IMPORTANCE OF OUTCOME-BASED LEARNING

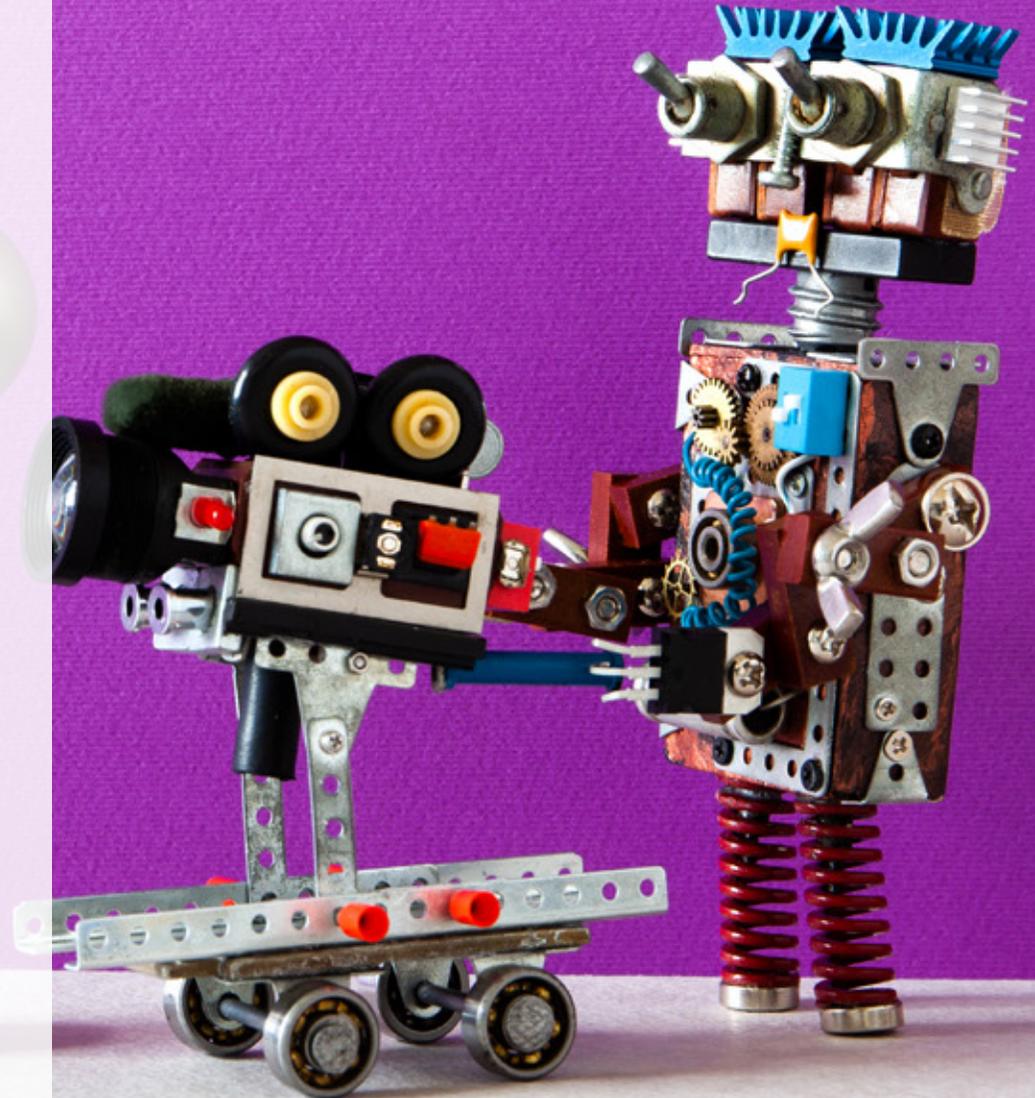
Outcome-based learning focuses that the education delivered should revolve around the outcome. As per the learning module, there is no specific style of teaching or assessment as the outcome should be able to achieve the specified outcome.

Why outcome-based learning makes sense:

- Student-centered approach so that a child can master a task and performance can be tracked
- Paves a way for students to achieve expanded opportunities
- Exceeds expectations as it creates a base for children to make them believe and encourage
- Expands opportunities as the learning process provides countless chances to meet the objective

CHAPTER 5

3-steps Video Series for Robotics



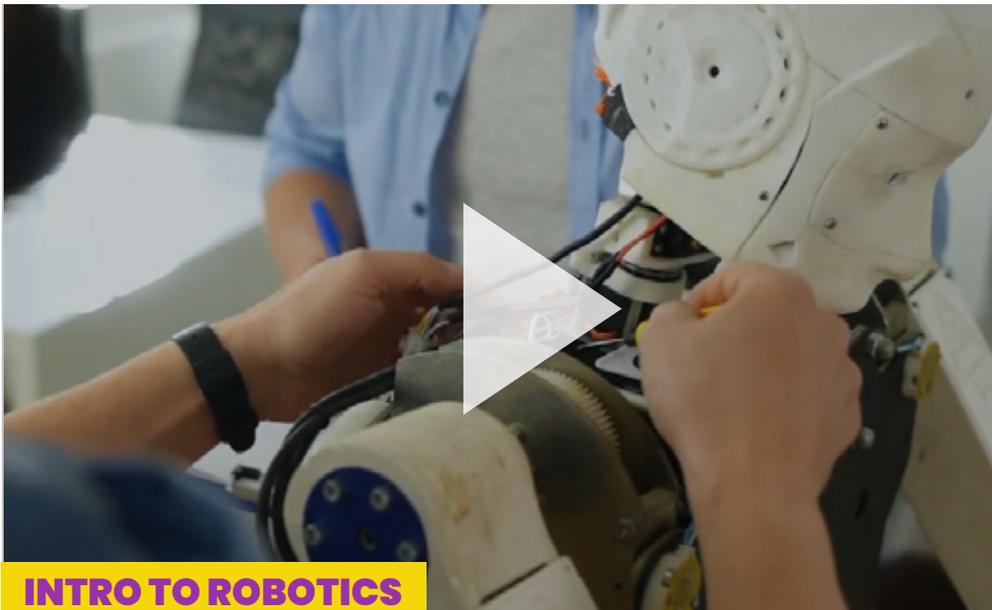
INTRO TO ROBOTICS

Robotics has come along far- from Mechanical Automata of the 10h Century to Roombas and Sophia. All this has been possible thanks to mankind's thirst for knowledge in the field of automation. Automation is the keystone in turning immovable objects into fully-functional, self-sufficient robots. **Learn how robotics and automation have changed the world:**

FUTURE OF ROBOTICS

Robotics is the way forward! With machine learning and automation, robotics is moving forward to take the centerstage in all aspects of life. From cooking meals in restaurants to autonomously roaming the surface of the red planet, robots are making life better in every manner. Robotics is opening the door to enhance robots further and create the ones that can boost the performance of humans and shift focus away from menial tasks. At Moonshot Jr, children are introduced to the basics of robotics through Arduino Uno & more at the basic level, before they get to the advanced level of robotics.

Future looks promising with robotics being the guiding force:

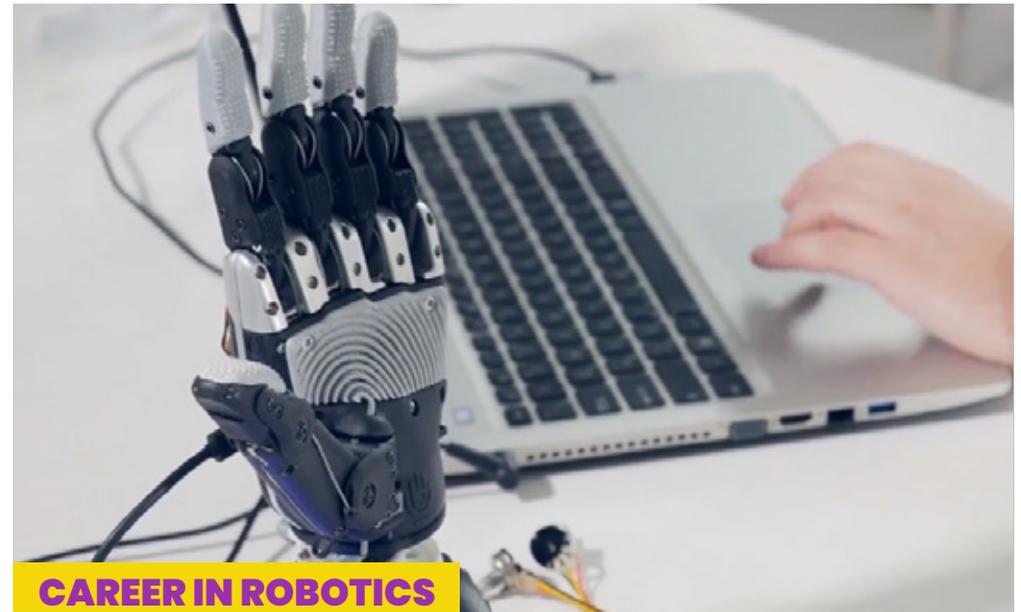


CAREER IN ROBOTICS

Robots are integrated in our day-to-day life. In the near future, the percentage of interaction with robots will increase. This will create new opportunities in the ever-expanding field of robotics. The field is home to niche career choices like Design Engineer, Software Engineer, Hardware Engineer, User Experience (UX) Designer, Data Scientist, Machine Learning Engineer, and Algorithm Engineers.

With packages ranging between \$121,000-\$70,000 with perks and perks, your child can see a bright career path.

All of this is possible if your child has a clear understanding of the basics and is ready to take up the challenge. **MAKE YOUR CHILD'S CAREER FUTURE-PROOF WITH ROBOTICS**

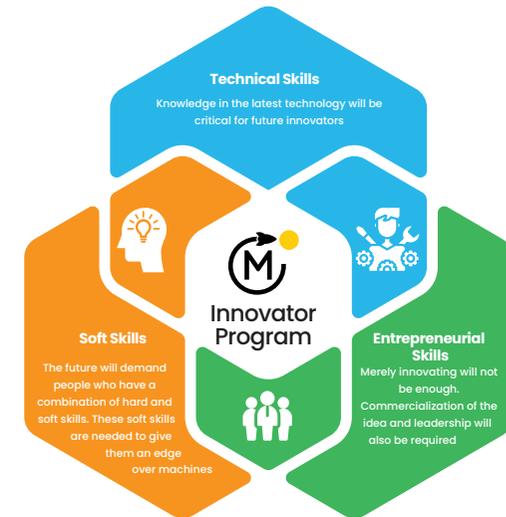


ABOUT MOONSHOT JUNIOR INC.

Moonshot Junior Inc. is Silicon Valley's fastest growing EdTech startup that has developed a unique teaching methodology and employs a product-based approach to prepare children for the future of work.

WHY PREFER MOONSHOT JR?

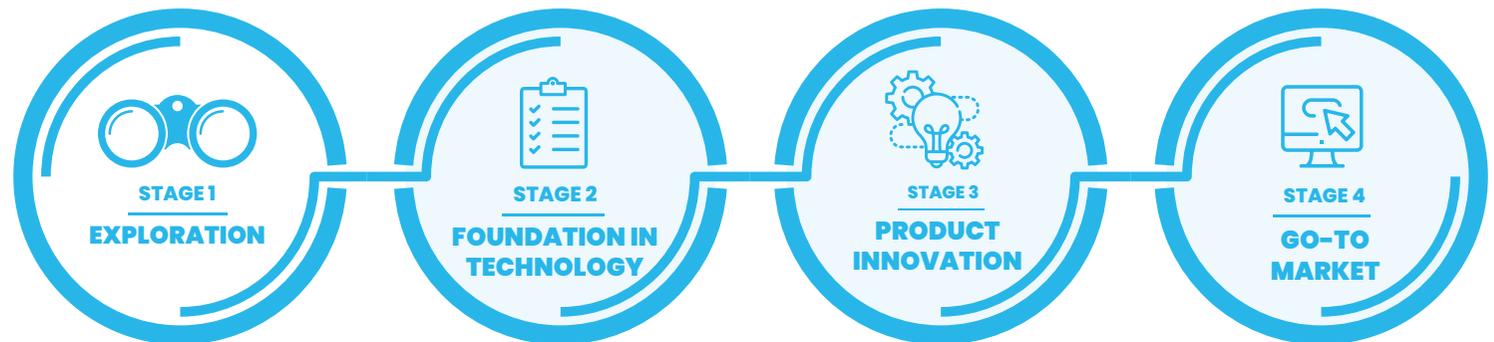
- Holistic learning experience
- Hands-on learning and training
- Several success stories
- Learn from global instructors and subject matter experts



ABOUT INNOVATOR PROGRAM

Moonshot Jr's Innovator Program, designed for children aged 10-17, is an educational program that empowers and nurtures them to become future innovators and entrepreneurs

4 STAGES OF EXTENSIVE LEARNING FOR EVERY CHILD



STREAMS OFFERED UNDER INNOVATOR PROGRAM

ROBOTICS

HOME AUTOMATION

GAME DEVELOPMENT

APP DEVELOPMENT

EXPLORE FUTURE TECH

OFFERS YOU CAN'T MISS OUT ON



BOOK A FREE TRIAL AND GET
A **FREE ARDUINO UNO** (WORTH \$20)

GET IT NOW



BOOK A FREE TRIAL AND GET
ROBLOX CREDIT FREE (WORTH \$10)

GET IT NOW

SUCCESS STORIES



SANIA – SANIA BOX

Sania created the Sania Box Embedded Learner Kit, a build-it-yourself computer kit that teaches children, of 8 years and above, to code and empowers them to develop STEM skills.



ANITEZ – MOON PI HUB CAM

Anitez Gauatm got early STEAM exposure on our platform and innovated Moon Pi Hub Cam. Here, he is talking about his creation and its advantages.

RACHEL – NRF ATTENTION REMINDER

Rachel's (from Dottie Rose Foundation) has prototyped NRF Attention Reminder using an Arduino board and 3D designed the outer casing as well. In the prototyping process, her team created a transceiver module using an NRF transceiver



TESTIMONIALS BY PARENTS

I would like to thank Moonshot Junior for coming up with this program. Before I enrolled my child in this program, I was worried about her future, but now I am relieved. Currently, my child is exploring future technologies because she is not sure what she wants to pursue further, but I am certain that this is a good start.

Max Robert

Thanks to Moonshot Junior's Innovator Program, my child is learning about so many new things. He is currently in the fourth stage and is learning about how to market and sell products. It's amazing how this program is helping my child learn about things that many adults are unaware of. Now, my daughter also wants to enroll in the Innovator Program. I am going to enroll her next year when she turns 10

Zoey

TAKE A **TRIAL SESSION ON**
ROBOTICS TODAY!

BOOK NOW

