

NEWSLETTER

INNOVATION IN ACTION: ROGATIONIST ACADEMY AI LAB

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QUOTE

“The future belongs to those who learn by doing and dream beyond limits.”

UPCOMING EVENTS

- * **Robotics Workshop**
January 2026
Experience in robotics, participating in guided sessions where they will design, build, and program robotic models.
- * **HBT & Expo: Student Project Exhibition**
January 2026
Organized by Rogationist Academy, the HBT and Student Expo showcases the creativity and innovation of students.
- * **The Educators' Training Program: AI for Educators**
February 2026
This training equips teachers with practical skills to integrate AI tools into lessons, enhance learning, and creative teaching methods for classrooms.



Academic Spotlight

Empowering Young Innovators with STREAM & AI @ Rogationist Academy

At Rogationist Academy, learning goes beyond textbooks – it's a journey of curiosity, creativity, and hands-on experiential discovery. Our STREAM & AI programs inspire students to question, explore, and innovate, blending science, technology, research, engineering, arts, and mathematics with real-world projects.

Here, students don't just learn concepts – they build, code, design, and experiment, turning ideas into practical, impactful solutions. With STREAM & AI education embedded in the curriculum, and supported by a cutting-edge innovation lab and a team of expert mentors, learners gain early exposure to intelligent systems, automation, and digital problem-solving skills that prepare them for the future.

Message from the Director

At Rogationist Academy, our STREAM & AI initiatives empower students to explore, create, and innovate with confidence. By integrating science, technology and engineering into real-world projects, we are nurturing the next generation of innovators who will contribute to society, drive progress, and shape a brighter, more sustainable future.



AI Lab Feature

learning goes beyond textbooks

At Rogationist Academy, we believe that learning goes beyond textbooks – it comes alive when students tinker, experiment, and create. Our STREAM & AI Lab serves as a dynamic hub of innovation and creativity, where curiosity meets cutting-edge technology, empowering students to explore, design, and innovate.

Innovation begins where imagination meets action – transforming learners into problem-solvers and ideas into reality.

"The lab features a complete set of state-of-the-art tools, including:



Development kits and robotic modules for building intelligent machines



3D printers to transform ideas into tangible prototypes

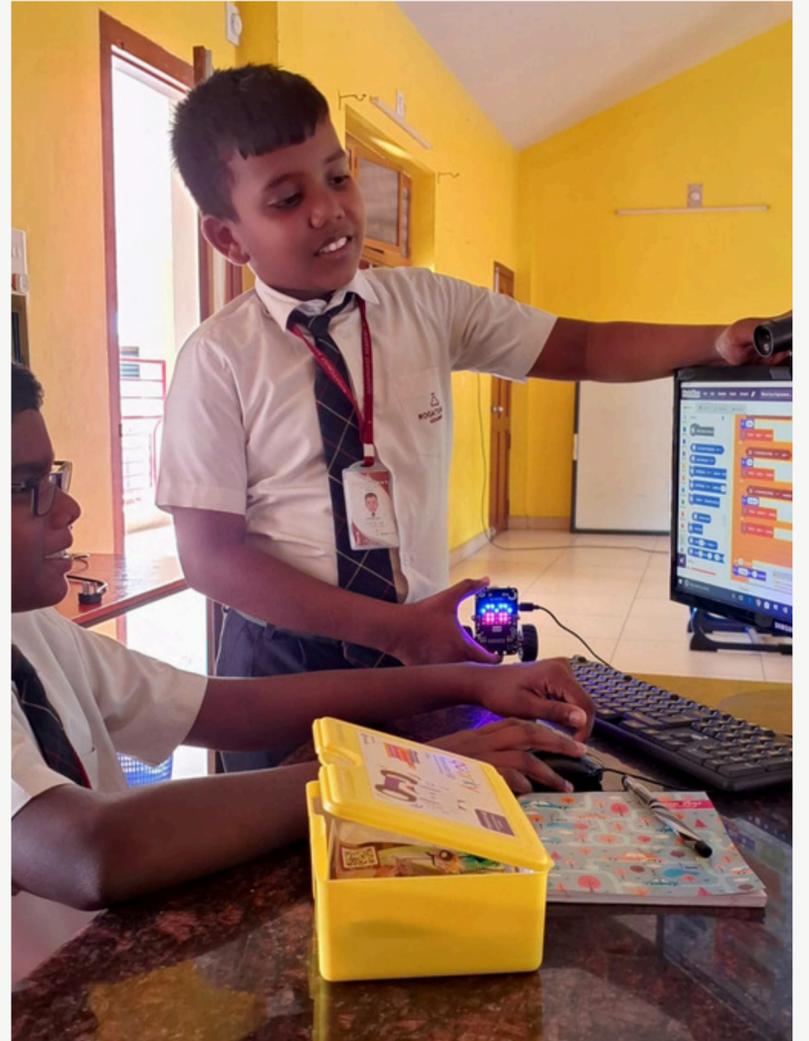


IoT devices and sensors to understand how machines sense and interact with the world



Arduino tools to design, code, and create interactive electronics projects.

...and many more resources that enable students to design, build, and test their own inventions.



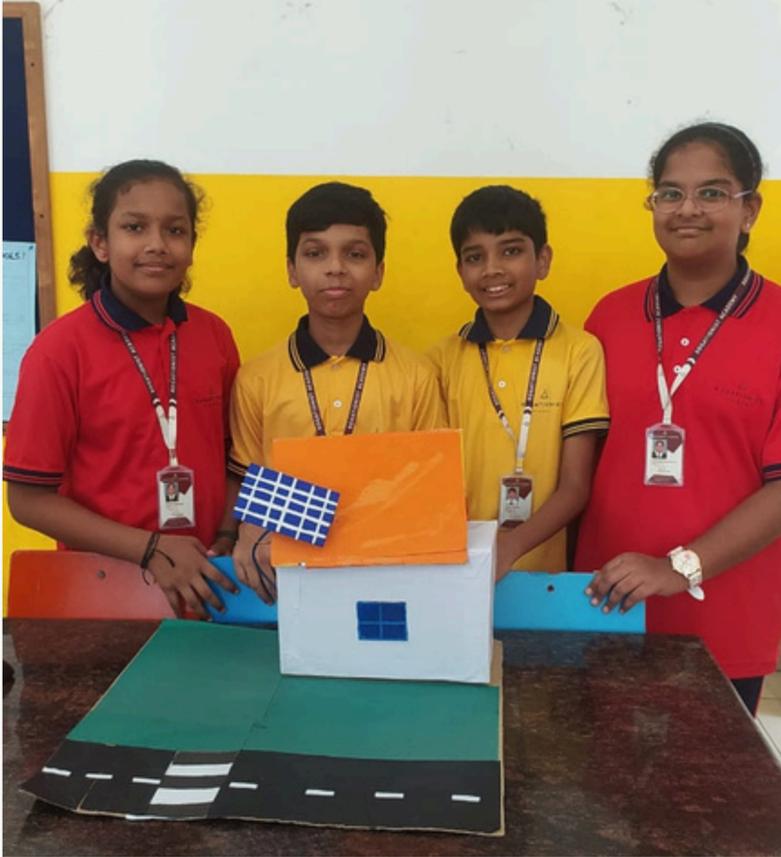
Young Innovators @ Rogationist Academy

AI & Robotics Lab @ Rogationist Academy

For students in Grades 4, 5, 6, 7, and 9, these sessions are seamlessly integrated into the curriculum, offering a structured and engaging introduction to technology. Learning begins with stories and guided projects to understand each tool, gradually progressing to independent exploration, experimentation, and the creation of original gadgets by combining different tools in innovative ways.

The lab fosters creativity, critical thinking, and problem-solving. Students analyze challenges, design solutions, test ideas, and iterate just like real-world innovators. From building smart irrigation systems and programming intelligent devices to experimenting with Arduino projects or designing prototypes with 3D printing, every activity provides hands-on experience with real-world technology.

Supported by **Hownwhy Education, Bangalore**, expert mentors guide students, demonstrate practical applications, and inspire curiosity. By the time they advance in grades, learners gain proficiency with tools and develop the mindset of independent, collaborative inventors and technologists, ready to bring their ideas to life.



Rogationist Academy AI & ROBOTICS PROGRAM

STEM & AI Program at the Rogationist Academy AI & Robotics Lab

Over the past three years, the introduction of dedicated STREAM (Science, Technology, Robotics, Engineering, Arts, and Mathematics) and AI sessions in the school timetable has provided students with a consistent and structured learning pathway. Through regular, focused periods in the AI & Robotics Lab, learners steadily build a strong foundation in technology, computational thinking, problem-solving, and innovation. Each lab session encourages experimentation, curiosity, and collaboration, ensuring that students develop not only technical skills but also essential life skills such as perseverance, teamwork, communication, and creative thinking. These carefully designed programs lay the foundation for future-ready learners, equipped to adapt, invent, and lead in a rapidly evolving technological world.

Rogationist Academy's collaborative labs and expert guidance turn curiosity into innovation, preparing students to solve real-world challenges.

These sessions at Rogationist Academy go far beyond traditional classroom theory, offering hands-on experiences where students actively experiment, tinker, and explore concepts in practical ways. Learners engage in projects that integrate science, technology, robotics, engineering, arts, and mathematics, allowing them to see ideas come to life. This approach not only reinforces theoretical knowledge but also encourages students to think critically, solve problems creatively, and apply concepts to real-world challenges. Collaborative learning is a key element – students work together to share ideas, divide tasks according to strengths, troubleshoot issues, and innovate solutions. By weaving creative exploration into a structured curriculum, learners gain the confidence to test hypotheses, iterate designs, and develop projects with practical applications and societal impact.

To make these experiences effective and engaging, Rogationist Academy collaborates with expert mentors from Hownwhy Education, Bangalore. These skilled technologists guide students through complex technology concepts in ways that are both fun and educational. Working alongside classroom teachers, they support student learning, demonstrate practical applications, encourage experimentation, and spark curiosity. With technologists and educators together, students do more than absorb knowledge – they actively create, innovate, and explore, developing the skills essential for the future.



Current Learning Journey: Grades 4, 5 & 6

Grade 4:

- Experimented with gears, simple circuits, and buoyancy.
- Focused on understanding basic mechanical and physical concepts.
- Developed hands-on skills, linking theory with practical applications.

Grade 5:

- Explored gears, pulleys, and hydraulics.
- Learned how forces and mechanisms work in real-life scenarios.
- Strengthened problem-solving and critical thinking through guided experiments.

Grade 6:

- Delved into electronics, circuits, robotics, and automation.
- Applied critical thinking to design and build functional projects.
- Learned how to integrate multiple technologies into innovative solutions.



Next Steps / Future Learning Path

GRADE 4 (NEXT):

- Introduction to basic robotics and AI concepts through story-based projects.
- Hands-on sessions with simple motors, sensors, and coding blocks.
- Building small automated gadgets, encouraging independent exploration.

GRADE 5 (NEXT):

- Exploring advanced mechanisms, simple circuits, and IoT basics.
- Integration of sensors and actuators in small projects.
- Developing mini automation systems and understanding how machines interact with the environment.

GRADE 6 (NEXT):

- Advancing into AI, robotics, and automation projects with real-world applications.
- Using 3D printing, microcontrollers, and drones to create functional innovations.
- Focus on independent innovation, where students design, test, and iterate their own projects.

This roadmap ensures a gradual, structured progression — from understanding basic mechanical and electrical concepts in Grade 4 to creating advanced AI-driven innovations by Grade 6 — preparing students for future-ready skills in technology and problem-solving.

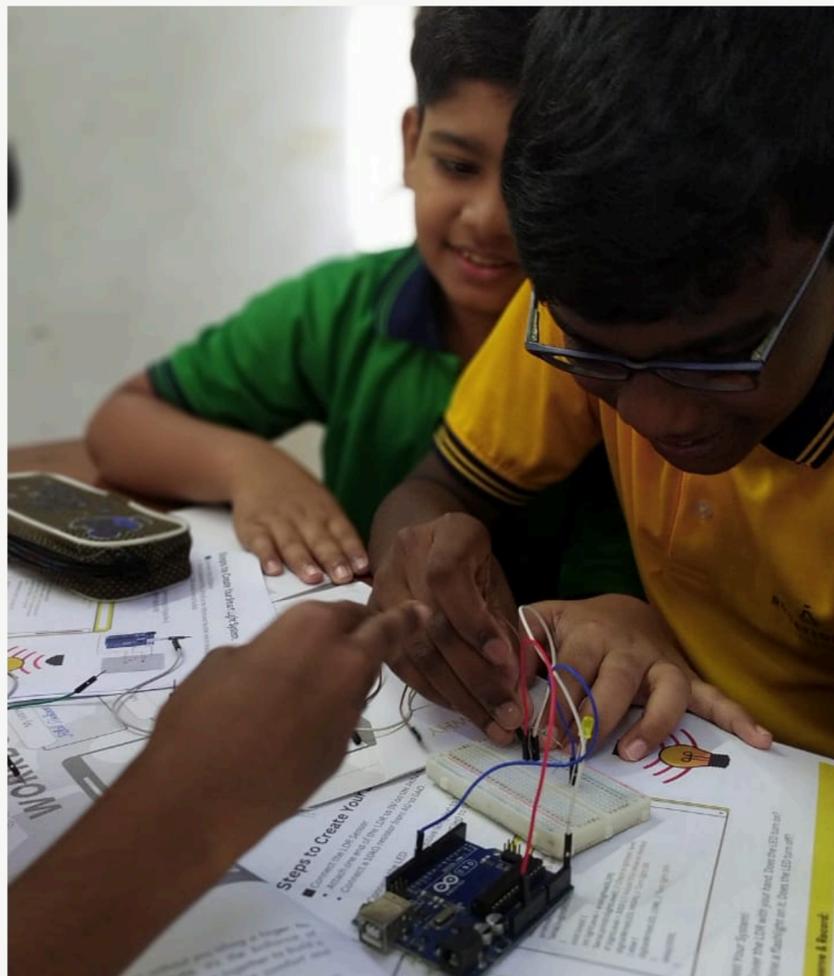
Current Learning Journey: Grades 7 & 9

Grade 7:

- Explored Electronics, AI, and Robotics to understand how technology powers modern innovation.
- Gained practical experience with Sensors and Actuators, learning how machines sense and respond to their environment.
- Strengthened design and analytical thinking through integrated STEM projects.

Grade 9:

- Advanced into Electronics and Microcontrollers, building a deeper understanding of system design and automation.
- Connected Environmental Science concepts with technology to create sustainable solutions.
- Continued exploration in AI, Robotics, and Programming, developing real-world problem-solving skills through project-based learning.



Next Steps / Future Learning Path

GRADE 7 (NEXT):

- Introducing 3D Printing and Design to help students visualize, model, and create tangible prototypes.
- Exploring Aeromodelling to understand flight principles, design thinking, and applied physics.
- Learning Cloud and Web Technologies to build digital awareness and foundational computing skills.
- Connecting Environmental Science with Engineering concepts to design sustainable, real-world solutions.

GRADE 9 (NEXT):

- Deepening understanding of Electronics, Robotics, IoT, and AI through hands-on, real-world projects.
- Applying Environmental Science concepts to design innovative and sustainable tech solutions.
- Introducing 3D Printing to bring creative ideas to life through design and prototyping.
- Exploring Cloud Computing to understand data storage, connectivity, and digital integration.
- Engaging in Aeromodelling to combine creativity, engineering, and physics in exciting, flight-based projects.

This roadmap ensures a seamless progression — from exploring 3D design, aeromodelling, and cloud technologies in Grade 7 to mastering AI, IoT, and advanced automation in Grade 8 — empowering students with future-ready skills in innovation, engineering, and sustainable technology.

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Redefining Education Through STEM Integration @ Rogationist Academy

To nurture creativity and problem-solving skills, exclusive challenges and activities for the students are being introduced. These challenges are designed to:

- Encourage Innovation: Inspire students to think creatively and design solutions for real-world problems
- Provide opportunities to work independently and in teams, fostering leadership and collaboration.
- Build confidence in robotics, AI, and STEM projects, ensuring girls feel equally represented and capable in all lab activities.
- Inspire innovation focused on societal impact, from designing sustainable solutions to creating gadgets that can solve everyday challenges.

At Rogationist Academy, learning goes beyond textbooks – it's about exploring, experimenting, and innovating. With STREAM and AI education integrated into the curriculum, students are developing the skills and mindset needed for the future – curiosity, creativity, and problem-solving.

Through hands-on learning and project-based activities, students connect science, technology, robotics, engineering, arts, and mathematics with real-world applications. From designing smart irrigation systems and Arduino projects to exploring robotics and AI, they learn by doing – turning ideas into innovations.

The school's STREAM & AI Lab and Innovation Hub provide the ideal space for collaboration and creativity. Supported by expert mentors and modern tools, students work on projects that encourage teamwork, critical thinking, and perseverance.

This vibrant STEM ecosystem inspires students to think independently and apply their learning to real challenges. Through expos, innovation challenges, and workshops, they gain confidence, leadership, and a deeper understanding of how technology can positively impact society.

Message from the Principal

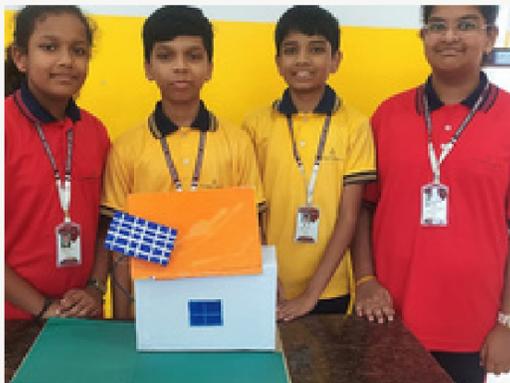
At Rogationist Academy, we focus on empowering every student to explore technology with confidence, curiosity, and creativity. Through our STREAM and AI programs, learners are encouraged to think independently, take initiative, and innovate with purpose. By nurturing a culture of exploration and inclusivity, we are shaping a generation of young minds ready to create, inspire, and lead the future.



Innovative Projects: Creativity in Action

At Rogationist Academy, our students do more than learn concepts — they bring ideas to life. Through the STREAM & AI Lab and hands-on sessions, learners have shown remarkable creativity, critical thinking, and problem-solving skills by designing projects that tackle real-world challenges.

Some of the outstanding projects include:



FSolar Tracker: The Solar Tracker uses advanced sensors and motors to follow the sun's movement throughout the day, ensuring solar panels receive maximum sunlight. This smart technology optimizes energy generation, demonstrating how innovative solutions can make renewable energy more efficient and environmentally sustainable.



Automatic Street Light: The Automatic Street Light uses light sensors to detect sunlight and switches on or off accordingly, conserving energy efficiently. This smart system demonstrates how simple technology can promote sustainability and reduce energy consumption.



Alcohol Detection System: The Alcohol Detection System uses sensors to detect the presence of alcohol in breath or the environment. When alcohol is detected beyond a safe limit, it triggers alerts to prevent accidents and ensure safety. This project demonstrates how technology can promote responsible behavior and protect lives.



Gas Guard: One of the standout safety innovations, GasGuard is a gas leak detection system that uses sensors to identify harmful gases and trigger immediate alerts. Students learned about gas sensors, alert circuits, and safety applications, gaining awareness of how technology can protect homes and lives.

Learning Beyond the Project

Through these initiatives, students develop more than just technical skills. They learn to:

- Ideate — Identify problems worth solving.
- Design & Prototype — Turn ideas into tangible models.
- Test & Refine — Learn from mistakes and improve iteratively.
- Collaborate — Work in teams, share roles, and communicate effectively.

Each creation is a journey of exploration — where every sensor connected and line of code written builds confidence, creativity, and deeper understanding.

The AI & Robotics Lab at Rogationist Academy is more than a space with tools; it is a hub of innovation where curiosity meets purpose. Here, our young innovators aren't just learning how machines work — they are learning how the future works, and how they can help shape it.

Innovation doesn't begin in labs—it begins in classrooms

"Innovation at the school level is not a sudden breakthrough—it is a journey."

It begins with curiosity in the classroom, where students observe their surroundings, ask questions, and identify real-world problems. Through structured STEM learning, hands-on activities, and guided exploration, these initial sparks are carefully nurtured.

With continuous mentoring, collaboration, and opportunities to experiment, students learn to refine their ideas, apply scientific principles, and think critically. What starts as a simple thought gradually evolves into a well-designed project—one that reflects creativity, purpose, and problem-solving skills.

This process of ideation, design, testing, and improvement ensures that innovation is not taught as a concept, but experienced as a practice—preparing students to become confident thinkers and future innovators.



Exploring Creativity Through AI Video & App Development

On 8th August 2025, a special online workshop was conducted for Grade 7 on the theme of AI Animation Creation and App Development. The session, led by domain expert Jeberson Sir, opened doors for students to explore the limitless possibilities of artificial intelligence through interactive learning. As part of the workshop, students designed and submitted their own AI-animated photos, videos, and games, showcasing not only their creativity but also their growing confidence in technology. This experience ignited their curiosity, proving that even young minds can shape the future with innovation. It was more than a workshop – it was the spark of a new generation of creators ready to turn imagination into reality.

The workshop also encouraged collaboration and peer learning, as students shared ideas and helped each other refine their projects. Many learners expressed excitement in applying AI concepts to solve real-world problems and exploring new ways to express creativity digitally. Overall, the session strengthened students' technical skills, critical thinking, and confidence, laying a strong foundation for future innovation in AI and technology.

AI Video Creation Competition: Bringing Textbook Stories to Life

On November 5th, students of Grades 5, 6, and 7 participated in an Animated Video Creation Competition, transforming poems or stories from their English textbooks into 1.5-minute animated videos. This activity blended language learning, creativity, and digital skills, helping students enhance storytelling, visual interpretation, and technological abilities. Their enthusiastic participation showcased growing confidence in using digital tools to bring lessons to life, making learning interactive, engaging, and fun.

Students are currently working on HBT projects, exploring STEM concepts, collaborating in teams, and applying creativity to real challenges – building confidence and skills for future innovation.

Message from the Vice Principal

Seeing our students innovate with empathy and purpose fills us with pride. At Rogationist Academy, every project reflects curiosity, creativity, and a drive to make a difference – shaping confident, future-ready innovators.



External Competitions: Showcasing Talent Beyond School

In 2025, students of Rogationist Academy actively participated in prestigious external innovation platforms, applying classroom learning to real-world challenges and demonstrating creativity, technical understanding, and problem-solving skills beyond the school environment.

- Young Innovators Programme (YIP – K-DISC)
 - Participated by Grade 9 students at the state level
 - Proposed a Smart Irrigation System based on soil condition monitoring
 - Focused on efficient water usage and sustainable agriculture
 - Encouraged innovation, problem-solving, and entrepreneurial thinking

- Srishti Kerala State Hackathon
 - Participated by Grade 9 students at the state level
 - Developed an AI-based Attendance System using facial recognition
 - Automated attendance recording with name, date, and time
 - Enhanced skills in AI, automation, teamwork, and real-world application

- Srishti Kerala State Hackathon
 - Participated by Grade 7 students
 - Designed a Security System for restricted area monitoring
 - Used sensors to detect human presence and trigger alerts
 - Strengthened logical thinking, electronics knowledge, and collaboration

At Rogationist Academy, students actively translate classroom learning into real-world applications, building confidence, gaining valuable exposure, and nurturing a strong spirit of innovation. Through hands-on projects and external platforms, they develop problem-solving skills, creativity, and the courage to explore new ideas—preparing them to think independently and innovate with purpose.



Message from Staff coordinator



It gives me immense pride to witness the journey of innovation, creativity, and growth our students have undertaken through this year's STREAM and AI initiatives at Rogationist Academy. These programs have provided meaningful opportunities for learners to explore technology beyond textbooks and apply their knowledge to real-world challenges.

Our students' enthusiastic participation and commendable performance in various innovation platforms and interschool events reflect the values of curiosity, collaboration, and perseverance that we strive to nurture. Their ability to think critically, work as teams, and present creative solutions is truly encouraging and speaks volumes about their dedication and innovative mindset.

As we move forward, we look forward to expanding these learning experiences through advanced workshops, coding programs, innovation challenges, and expert mentoring sessions. These initiatives will further strengthen students' understanding of emerging technologies and equip them with the confidence, skills, and vision needed to face future challenges and contribute meaningfully to society.

External Competitions: Showcasing Talent Beyond School

- Hack4Future 2025 - National Level Hackathon

Students from Rogationist Academy delivered an outstanding performance at Hack4Future 2025, competing against 200+ entries from across the country and advancing through the Top 80 semifinalists nationwide.

- The first team — Ayush A.E, Catherin Joby, Jewel Maria Wilson, and Irene Timmy Puthussery — presented a Better Waste Management System, focusing on efficient segregation and sustainable disposal solutions.
- The second team — Jake Jaison, Antonio J Prince, Nasra Ann Abraham, and Ihaan Ahammed — developed a Smart Irrigation System designed to optimise water usage through automation.
- Among the participants, Nasra Ann Abraham was honoured with a Special Mention – Student Award for her exceptional contribution and innovative thinking, earning recognition among the most impactful young innovators of the event.



- AI & STEM Education Excellence Awards 2025

- Rogationist Academy, Aluva, has been honoured with the AI & STEM Education Excellence Award 2025, recognizing outstanding AI and STEM practices among schools across Kerala and Tamil Nadu.
- Under the leadership of Principal Mrs. Reena Catherine, the school has been awarded for successfully integrating STEM and Artificial Intelligence into its academic culture, promoting inquiry-driven learning, and nurturing a vibrant student innovation ecosystem.
- This prestigious recognition reflects Rogationist Academy's commitment to fostering creativity, critical thinking, and future-ready skills among its students.

At Rogationist Academy, students transform classroom learning into real-world solutions, gaining confidence, practical exposure, and a lasting spirit of innovation.



Looking Ahead: Inspiring Innovation and Exploration

The coming months at Rogationist Academy promise to be exciting and inspiring for our young innovators. Students will continue to engage in hands-on experiments, robotics creations, and AI-based projects, along with STREAM challenges that spark curiosity, strengthen problem-solving skills, and nurture creative thinking.

1. EXCLUSIVE ROBOTICS WORKSHOP FOR ROGATIONIST ACADEMY STUDENTS

Students will participate in an immersive robotics workshop featuring guided, hands-on sessions where they design, build, and program robotic models. Through exploration of automation, sensors, and real-world applications, learners gain practical skills and deeper technological understanding. This workshop aims to ignite innovation, strengthen technical competence, and inspire future-ready engineers and problem-solvers.

2. HBT (HOWNWHY BUDDING TECHNOLOGIST) PROGRAM

Organized in collaboration with HownWhy Education, the HownWhy Budding Technologist (HBT) program provides students with a focused platform to apply their STREAM and AI learning to real-world challenges. Through guided mentorship and hands-on project development, students design innovative solutions, strengthen problem-solving skills, and showcase their creativity and technical competence during the HBT Student Expo.

3. TEACHERS' TRAINING PROGRAM

Specialized teachers' training programs will be conducted to empower educators with practical skills in integrating AI, robotics, and STREAM into classroom teaching. Through hands-on workshops, guided mentorship, and interactive sessions, teachers will enhance lesson planning, personalized learning strategies, and creative pedagogy. This training will equip educators to confidently adopt innovative teaching methods, foster student engagement, and cultivate a future-ready learning environment.



At Rogationist Academy, we believe curiosity drives innovation. By exploring robotics, AI, and hands-on projects, our students are not just learning—they are creating, experimenting, and leading. Each workshop, hackathon, and expo is a step toward shaping a generation of confident innovators ready to transform ideas into real-world solutions

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Student Corner: Voices of Young Innovators & their mentor.



“The robotics lab is my favorite place. I love experimenting with sensors and seeing how small changes can make big things happen!”

— Vedha Vinayan, Grade 6

Working on AI and Robotics projects has been an incredible experience! I’ve learned to explore ideas, solve problems, and work with my classmates. Each experiment and project makes learning fun and exciting, giving me confidence to try new things and think creatively.



“I enjoy building and programming robots the most. Each experiment teaches me something new and gives me confidence to try innovative solutions.”

— Neha Binu, Grade 7

I enjoy working on AI and Robotics projects because they help me explore new ideas and find creative solutions. Each experiment is exciting and boosts my confidence, teaching me to think critically and work effectively with others



“Working on AI and robotics projects has been amazing! I’ve learned to explore ideas, solve problems, and collaborate with my classmates. Every project makes learning fun and sparks creativity.”

— Gia Tess Christin, Grade 9

Being part of AI and Robotics projects has been amazing! I’ve learned how to turn ideas into practical solutions, tackle challenges, and collaborate with peers. Every project makes learning engaging and inspires me to think innovatively

In the lab, students don’t just build robots or gadgets—they also learn to work together, share ideas, and help each other. They practice:

- Listening to their friends
- Sharing tasks
- Solving problems as a team

Whether it’s fixing a circuit, making a model, or showing their project, students learn patience, teamwork, and clear communication. These experiences help them become confident, creative, and ready to solve problems.

Message from the trainer @ ROGATIONIST ACADEMY

SEENA JOSEPH
Sr. Mentor, HowNWhy Education, Bangalore



“Working with the students has been an incredibly rewarding experience. Their curiosity, creativity, and enthusiasm for learning are truly inspiring. Whether it’s during hands-on sessions, project showcases, or innovation challenges such as Hack4Future, they approach every task with excitement and determination.

It’s amazing to watch them brainstorm, design, and bring their ideas to life — learning to think critically, collaborate effectively, and persevere through challenges. These experiences are shaping them into confident, future-ready innovators who are not just learning technology but using it to make a real impact.”

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AI & STREAM Partner Spotlight: Hownwhy Education, Bangalore

HowNWhy Education, based in Bangalore, is a leading organization transforming STEM and AI education across South India – including Kerala, Tamil Nadu, Maharashtra, and Karnataka – as well as in African countries like Ghana and Kenya. With over 3 lakh students impacted by their expertise, HowNWhy has been instrumental in making complex engineering and technology concepts simple, engaging, and accessible for young learners.

Their unique approach focuses on demystifying engineering principles, providing hands-on learning experiences, and encouraging curiosity and problem-solving. Rogationist Academy has proudly collaborated with HowNWhy Education over the past three years, integrating their mentors and programs into our STREAM and AI curriculum. Moving forward, we aim to expand these initiatives to more grades, giving even more students the opportunity to explore, experiment, and innovate under the guidance of HowNWhy's expert technologists.

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“When a school’s vision embraces innovation, and educators nurture curiosity, students at Rogationist Academy don’t just learn—they create, explore, and lead. That’s the power of AI & STREAM education in action.”



Message from Mr. Ajay Sagar, Founder & Chief Mentor @HowNWhy

“Working with Rogationist Academy has been an incredible journey. The vision and forward-thinking of the school leadership have allowed us to gradually build a solid foundation for AI and STREAM education. When the management’s vision aligns with innovative programs like AI & STREAM, the results are truly remarkable. The Principal and teachers have been immensely supportive at every step, creating an environment where students can explore, experiment, and innovate freely. We extend our heartfelt gratitude to the entire Rogationist Academy community for their trust and collaboration in shaping future-ready learners.”