



WHIZ KID WITH A PURPOSE CODING FOR A CAUSE



**HEMESH
CHADALAVADA**

GRADE - XII D

Hemesh Chadalavada has already created multiple devices and is interested in electronics and robotics. The **TOI #Unstoppable21** jury has picked the Hyderabad boy as one of the **Unstoppable 21 Indians under 21 years**

He has crafted a device to help dementia patients

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When he was 12, Hemesh Chadalavada witnessed his grandmother's struggle with Alzheimer's. "She had no control over her mind and body. Sometimes, she would leave her bed in the middle of the night, and we couldn't find her," Hemesh, 16, recalls. The available gadgets, he says, offered little assistance. Driven by his grandmother's challenges, Hemesh embarked on a mission to create a smart wristband to aid the elderly afflicted with dementia, relying on the internet for guidance.

Today, the Hyderabad boy's 'AlphaMonitor' is creating waves with accolades pouring in from all quarters. The device is on the cusp of hitting the commercial market. However, a bittersweet feeling lingers as his grandmother never got to benefit from the device. By the time it was completed, his grandmother was no more. Nevertheless, Hemesh's device holds the promise of helping countless others facing similar difficulties.

So, what does his 'AlphaMonitor' do? The device comprises two interconnected components – a watch-like device that can be worn on the wrist, or as a badge. This monitors a patient's gait, posture, body

Hemesh won the Pradhan Mantri Rashtriya Bal Puraskar for his device in 2021. "I plan to launch the 'AlphaMonitor' in next six months, following research at IIT-D and the acquisition of intellectual property certification," he says.

temperature, and pulse. It can even detect falls.

The second component is an alarm system for caregivers, which promptly notifies them in case the patient falls, wanders away, or suffers an accident. Further, the alarm includes a 'Pillbox' feature that sends alerts when it's



HELPFUL IDEAS: Hemesh created the smart wristband for dementia patients after witnessing his grandmother's struggles

time for patients to take their medication.

He won the Pradhan Mantri Rashtriya Bal Puraskar for his work in 2021. Those who've closely followed

#Unstoppable21

A TOI initiative to identify and celebrate 21 of India's young prodigies. To know more about the young prodigies of India under 21, visit: www.unstoppable21.in

Hemesh's journey attribute his success to his dedication.

"I first met him in 2019 during 'Ideate For India', a nationwide event that selected 50 out of 1.3 lakh school students. Among these tal-

ented individuals, Hemesh stood out. What set him apart was his exceptional aptitude for thorough research and implementation.

"When I provided guidance on prototype development, testing, and monitoring, Hemesh displayed tremendous dedication. He

delved deep into the subject and executed the recommendations with great precision. His achievements and recognition are a testament to his own hard work and brilliance," said Dhruv Saidava, co-founder, Tinkering India.

The young innovator also credits his parents for his achievements. "Apart from encouraging me through the developing process, they also offered financial support. It cost around Rs 1 lakh to build the final prototype and they helped with that," says Hemesh, who secured a grant of Rs 33 lakh from Samsung and IIT Delhi last year.

"I plan to launch the 'AlphaMonitor' in the next six months following research at IIT Delhi and the acquisition of intellectual property certification," he said.

And what's next for him? "I am currently in class 12 and want to pursue electronics engineering and robotics either from an IIT or from an overseas institute after this... I want to transform my passion into my career," said the teenager, who has also designed a pothole detection system using machine learning, an accident notification system, and an AI chatbot for career counselling.