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Maryland teen lands perfect SAT score

Anand Oza says he didn't specifically study for the SATs but was building for the test since middle school. His weak point, essay writing, is what he focused on this year

By ELA DUTT

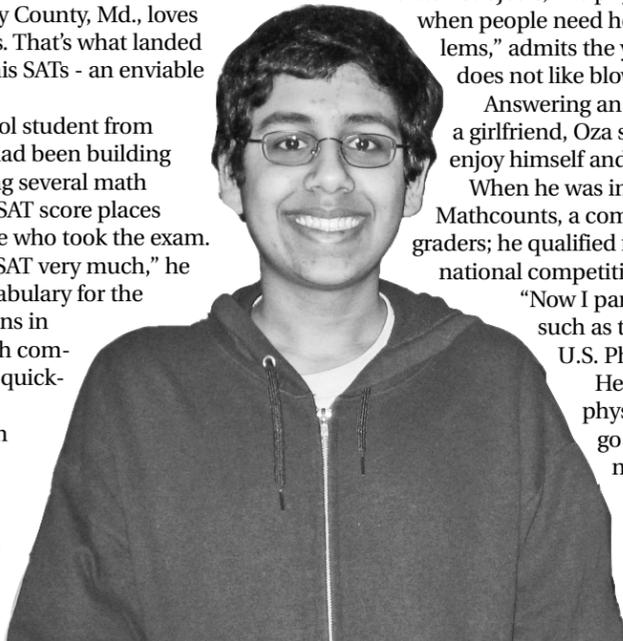
Anand Oza, 16, of Montgomery County, Md., loves math and physics, and words. That's what landed him with a perfect score on his SATs - an enviable 2,400.

The Montgomery Blair High School student from Potomac told News India Times he had been building his skills since middle school, topping several math competitions and spelling bees. His SAT score places him in the top .02 percent of all those who took the exam.

"I didn't study specifically for the SAT very much," he said. "However, I studied a lot of vocabulary for the North-South Foundation competitions in middle school. Also, I do a lot of math competitions, so I have practice working quickly and accurately."

The North-South Foundation is an Illinois-based nonprofit started by Indian Americans that holds annual spelling bees.

When Oza felt he had to brush up his essay writing skills, he practiced repeatedly, timing himself and writing under pressure, "since that's



generally my weak point on the SAT and other tests."

Known in school for his wizardry in mathematics and other related subjects, like physics, Oza is also "generally helpful when people need help with a math or physics problems," admits the young man who, his mother says, does not like blowing his own trumpet.

Answering an emphatic "No," to whether he has a girlfriend, Oza says he does go out with friends to enjoy himself and is on the school tennis team.

When he was in middle school, he took part in Mathcounts, a competition for seventh- and eighth-graders; he qualified for the state team once and for the national competitions twice.

"Now I participate in other competitions, such as the USA Math Olympiad and the U.S. Physics Team tests."

He said he wants to major in math or physics "or both" in college and then go to graduate school. "After that, I'm not sure."

In the end, he is a typical teen in so many ways: "I enjoy playing video games, especially the Super Smash Bros series for the Nintendo series of game consoles."

Illinois student wins NASA scholarship



Sumit Dutta

By ELA DUTT

Since he was in high school, Sumit Dutta has marveled at the cosmological revelations made during space missions and has hankered after using that knowledge to create a real impact on society and science. Now an undergraduate at the University of Illinois, Urbana-Champaign, he is well on his way to fulfilling his ambitions. Dutta was the only Indian American out of 25 scholars to receive NASA's 2009 Aeronautics Scholarship, announced May 12.

The scholars were selected from hundreds of applications, NASA said. Dutta will receive \$15,000 per year to cover tuition costs for two years and a \$10,000 stipend during a summer internship with NASA.

Born in Norman, Okla., and brought up in Maryland, Dutta says he realized early on that a lot of the latest technology was often developed first for aeronautics. His interest paid off a few years ago with an internship at NASA's Goddard Space Flight Center.

"The ability to have a great impact on society with science excited me to pursue a career in aeronautics," he told News India Times. An undergraduate in electrical engineering, Dutta immersed himself early on in physical electronics research with Professor Eric Pop's group at the Micro and Nanotechnology Lab at the university.

"Our group's goal is to understand electrical and thermal transport in novel electronic devices," he said.

"Traditional silicon transistors are simply too hot and leaky to improve computer processing, so we investigate novel transistors made with high-conductivity materials such as carbon nanotubes," Dutta explained.

His research on carbon nanotube transistors is ultimately aimed at making them viable for use in actual engineering applications, including aeronautics. He said he plans to attend graduate school once he gets his bachelor's degree, and continue his interest in physical electronics. "Ultimately, I may want to work for NASA or start a business."

3 Indian Americans win epidemiology scholars awards

While working at the Institute of Clinical Outcomes Research and Education (ICORE) in Palo Alto, Calif., Amrita

Sehgal, 18, of Menlo Atherton High School, in Atherton, Calif., wondered if teenagers like her were taking enough calcium to help prevent osteoporosis later in their lives.

Her research won her the top \$50,000 Robert Wood Johnson scholarship in the Young Epidemiological Scholars (YES) Competition, the results of which were announced near the end of April.

Sehgal found only 38 percent of students participating in her study met the requirement for the daily recommended calcium intake, with just 20 percent of girls and 52 percent of boys meeting the daily recommended intake. She also found that teenagers got less calcium in their diet as they got older. She recommended increased health education among teenagers to promote the importance of calcium intake.

She was one of three Indian Americans to win a place in this rigorous competition; the other winner was Allan Joseph, who came in second to win a scholarship of \$35,000. Fifteen-year-old Visakha Suresh was a contest finalist and won \$15,000.

The contest pitted some 60 high school students, selected out of more than 560 entrants nationwide, against each other when they presented their projects to a panel of top epidemiologists at the competition in Washington, D.C.

Joseph, 17, of Saint Charles Preparatory School in Columbus, Ohio, focused on certain injuries in high school athletics. Using a database that collects information from certified ath-



Visakha Suresh



Allan Joseph



Amrit Sehgal

letic trainers at more than 100 high schools across the nation, his study is the largest national study conducted of injuries to the anterior cruciate ligament, one of four major ligaments of the knee.

Allan found athletes were eight times more likely to be injured during competition than during practice and that the highest risk sport for such injury was football for boys and soccer or basketball for girls.

He also found that in sports played by both boys and girls, girls were eight times more likely than boys to suffer such an injury, confirming the results of other studies. To prevent such injuries, Allan recommends coaches and trainers be made aware of the most high-risk activities, enforce better officiating to minimize injury and add exercises that strengthen the muscles around the knee to provide greater stability.

Suresh, of Plano West Senior High School in Plano, Texas, was curious to find out if the socioeconomic status of their neighborhood affected the nutrition and exercise habits of the people living there.

She checked out the supermarkets in a rich and a poor neighborhood and

found the affluent neighborhood had three times more places to get healthy foods than the poorer neighborhood. She also found there were three times more areas for physical activity in the affluent neighborhood.

When she observed people in both neighborhoods participating in physical activities, she found that moderate to vigorous exercise was significantly more common in the wealthier neighborhood. Her findings confirm other studies that show the availability of healthy food and opportunities for physical activity are associated with neighborhood economic status.

Another finalist, Jason Bishai, of Dulaney High School in Hunt Valley, Md., presented a project on tuberculosis in India.

Bishai got interested in tuberculosis when he saw first-hand the consequences of TB infection while working in a microbiology lab at Johns Hopkins University.

He developed a computer simulation of the epidemiology of tuberculosis in India and used that to test the best methods of identifying and rapidly treating infected people to stop the spread of the disease.