

Summary Letter for Aarush Judgdar:

The North Carolina School of Science and Mathematics (NCSSM), a public, residential high school, has been a global leader in education for over 40 years, educating academically talented North Carolina high school juniors and seniors. The school has a commitment to represent all thirteen Congressional Districts in N.C., which provides a diverse population of all socio-economic, racial, and ethnic backgrounds. Academic preparation for students coming to NCSSM ranges from underserved schools to the most advanced educational settings in N.C. Based on the nature of our academic program, NCSSM does not rank students. If you have any questions, please feel free to contact me at 919-416-2837 or younes@ncssm.edu

I have had the great pleasure of serving as Aarush Judgdar's counselor since his arrival to the North Carolina School of Science and Mathematics at the start of his junior year. Aarush comes to NCSSM from Cox Mill High School, located in Concord, NC. This young man has done A LOT

Aarush's academic record is clearly evident of his intellect, drive, and ability. Once he learned that he could get credit for courses through Credit by Demonstrated Mastery (CDM) in 9th grade, he saw it as an opportunity to challenge himself and not wait for things to be taught to him—he could learn it himself. Aarush self-studied chemistry and pre-calculus, teaching himself the full course content independently and passing rigorous exams to earn credit for each of those classes. Without a teacher or structured curriculum, he relied on his own self-discipline, resourcefulness, patience, and skill. His motivation for doing this was not merely to get ahead, he was sincerely interested in learning, and it did ultimately pave the way for him to be able to take AP Chemistry and AP Calculus sooner, which then opened doors to courses like Organic Chemistry, Biochemistry, and Multivariable Calculus at NCSSM. "These classes were of genuine interest to me and helped me incorporate a lot of application-based learning into my school life, something that I deeply value," he explains. His course choices reflect not only academic curiosity but also a deep commitment to self-driven learning.

During one of the most intense academic stretches for Aarush where he was prepping for the SAT while balancing final exams, especially for Organic Chemistry, Multivariable Calculus, Spanish, he hit a breaking point and felt his first real burnout point. He found his mind racing and couldn't sleep. He reached a point, however, where he was reminded of advice given to him by his friend and family and he tried meditation for the first time. He closed his eyes, focused on his breath, and found a stillness he didn't think was possible. That experience transformed how he handles stressful moments. He even found himself using it while taking the SAT! He took a moment to observe his anxiety instead of fighting it. This mindset helped Aarush regain control and stay grounded. He is a regular now and has learned, in his own words, that "composure isn't the absence of stress; it's learning to navigate through it." Quite an astute observation from such a young man.

Aarush highly values his Hindu teachings that guide many of his life decisions, from healthcare to education to how he interacts others. He has been taking Sloka class, a Hindu scripture and values class, since fourth grade as a way to understanding and honoring his heritage. Wanting to bridge the gap between his Indian heritage and American upbringing, Aarush co-founded Sloka Nidhi, a YouTube channel that teaches spiritual and cultural lessons to young Indian-Americans. This grew into a digital community with over 5,000 subscribers, one million total views, and a presence in 7 Hindu temple programs. Aarush selects the sloka scriptures, writes the scripts, edit videos, and delivers the content. In doing this passion project, he also learned to interpret YouTube analytics and tailored content to maximize engagement. By analyzing information, he was then able to create a cultural storytelling channel into a platform that celebrates identity while fostering connection.

Aarush's background has contributed greatly to his ability to understand how others struggle in various ways. He has served his community in multiple ways, becoming the Stock the Shelves Food Drive Leader (a service project aiming to raise money for the Young Investor's Society access initiative and donate food to food banks). Aarush saw the opportunity to make a dual impact: address immediate food insecurity and promote long-term economic empowerment, with the heart of initiative being to collect and donate food for local families in need. He organized



donations for the food pantry and food bank, ultimately coordinating the delivery of 358 pounds of canned goods. Wanting to go beyond providing short-term relief, Aarush integrated the Young Investors Society (YIS) Access Initiative, which offers financial literacy education, mentorship, and STEM guidance to underserved youth. He set a goal to raise \$100 in sponsorships, to support the food drive and fund access to YIS resources for students facing systemic barriers. He spent time cold-calling local food banks to form partnerships, built relationships with school clubs like the Beta Club, and collaborated with the Concord Youth Council to expand community involvement. He also created a GoFundMe campaign, encouraging local banks and financial institutions to match donations with \$1 per pound of food donated! “This project taught me how to connect short-term service with long-term change—and how to mobilize a community around a shared mission. It wasn't just about giving food; it was about giving people the tools to build a better future,” he explains.

Through research, is where Aarush learned that progress often starts with failure. The mistakes made in the lab taught him to slow down and think deeply before jumping into experiments. He started writing detailed protocols before beginning any procedures and reflected on the “why” behind each step. Most importantly, he learned how to communicate his findings, answer difficult questions, and propose new research ideas. His work on lateral flow assays led to a conference presentation focused on how to detect asymptomatic COVID-19 cases. Other projects he worked on involved work with “horseradish peroxidase (HRP) for glycoprotein capture, which has potential applications in glycoproteomics, biomarker detection, targeted protein enrichment, and improving the sensitivity of diagnostic assays, which can make a significant impact on communities where this glycoprotein isolation for clean filtration.” (all that is in quotations because I don’t know what it means).

With all he has done, Aarush considers his most meaningful impact to be the work he’s done with the autism community. Per usual with him, he started with a question—“how can we help individuals with autism navigate a world that often misunderstands them, without asking them to change who they are?” Together with a friend, they created an app called *Autism Assist*, with the goal of helping children with autism recognize and interpret social cues. He understands that missing social cues can make it harder to connect with peers, leading to social isolation. Intentionally not trying to “fix” or change the individuals, he and his partner focused on helping them learn the “language” of neurotypical social behavior, so they could engage more confidently in their own way. They explored how AI could be used to recognize facial expressions and give real-time feedback, allowing kids with ASD to practice and refine their responses on their own terms. “Through *Autism Assist*, I’ve learned what it means to serve a community: not by speaking for them, but by listening, collaborating, and building something *with* them. That’s the kind of impact I hope to keep making throughout my life,” Aarush explains.

I could go on and on, but I think you get the idea of how phenomenal this young man is. From taking charge of his own learning, grounding himself in his heritage and the one he lives in, utilizing his skills to make and impact and connect with others—the world is just a big oyster to Aarush and it’s exciting to think about who this young person will continue to grow into and do for our world.

Sincerely,
Lamia Younes
NCSSM Counselor