Dean's List Submission: Shaqeeb Momen (Winner Windsor 2015)

The phrase, "Can I ask you a question?" is often heard in the technology wing of Rick Hansen Secondary School. The question implies curiosity and politeness, which are key characteristics of a successful student. Shaqeeb Momen, a sophomore on Team 1285: The Big Bang, has adopted this saying and brings it wherever he goes. Rather than waiting for his senior year to earn a lead role, he impressed everyone with his curiosity and passion for robotics. Shaqeeb has accelerated in demonstrating the ideals of *FIRST* and his passion has undoubtedly spread to his peers.

Since the debut of Team 1285, Shaqeeb has demonstrated tremendous growth in his leadership skills. Despite only being in grade 10, he has made a large contribution towards the organization of the team. His approachable personality and open mindset allows him to be an excellent student representative on the Operations Team. He ensures that all of the students' ideas are considered and puts his best effort into creating an inclusive and efficient environment for his team. Furthermore, Shaqeeb helped facilitate 27 workshops just for the 2015 preseason. He even took the initiative to lead some of these workshops to teach design and CAD principles to his peers. Aside from the technological aspect of the team, he also leads other students in developing a submission for the Future Innovators Award. Whether focusing on team organization or technical expertise, Shaqeeb has been an excellent lead who supports the growth and success of his team members.

Shaqeeb's determination for Team 1285 to succeed is also demonstrated through the dedication and quality he puts into his own design work. Despite his young age, Shaqeeb understands complex engineering concepts and is fluent in 3D modelling. He has already exceeded the skill level required for the senior technological design class, and has even progressed into designing his own inventions. Some key contributions he made as a rookie designer in the 2014 season include a ball settling mechanism and a limit switch mount. This was not the only time Shaqeeb had impressed his mentors. After completing his first FRC season, he zoomed through a challenge that many first year designers would struggle for. Shaqeeb helped to design a variant of the grasshopper drive, allowing the robot to easily maneuver out of defense without sacrificing torque and power. When his creativity was coupled with his love for designing, Shaqeeb created a 3D-printed phone case featuring a working gear train that spins the team's logo. Shaqeeb's analytical thinking and innovative design has been consistently evident through his various works. Ever since he first laid his hands on CAD software, he has devoted much of his time towards sharpening his skills.

Shaqeeb continues to demonstrate his leadership skills by promoting STEM education to the community. Throughout many outreach events, Shaqeeb encourages children to think analytically, problem solve, and most importantly, to have fun. Whether he is volunteering as an FLL referee or leading robotics library workshops, Shaqeeb always uses his enthusiasm to ensure every child enjoys learning as he does with teaching. By making specific LEGO build kits for each workshop, Shaqeeb created an interactive learning experience where young students gained valuable knowledge of mechanical and electrical concepts. These concepts included simple machines such as gears, levers, and pulley systems. While bringing laughter to many, Shaqeeb has truly shown his ability to make learning fun for a wide range of students.

In just two years, Shaqeeb Momen has demonstrated an extraordinary amount of growth and potential. He is an excellent role model who is able to help others find the passion, enthusiasm, and fun in *FIRST*. He is a strong innovator who is quintessential to the success of the team. Shaqeeb is not afraid to ask questions but as one of our leaders, he now also has the confidence to say, "Here's what we can do."