



BRANHAM HIGH SCHOOL

"Home of the Bruins"

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Dear Members of the Scholarship Committee,

It is my pleasure to recommend Alex Soman to the Bio-Rad Employee Dependent Scholarship. I have had the privilege of teaching him in four computer science courses over his four years of high school, during which he consistently demonstrated curiosity, intelligence, and patience. In each class, Alex earned the highest grade each semester, earned a 5 on the AP CSA exam and distinguished himself as one of the most motivated and capable students I have taught. He approaches every challenge with diligence and enthusiasm, continually striving to expand his understanding and refine his skills as a computer scientist.

Alex has developed an impressive portfolio of programming projects both inside and outside the classroom. His deep interest in mathematics often serves as inspiration for his coding endeavors. While learning graphical programming in Python, he created intricate fractals - including the dragon curve, Mandelbrot set, and Sierpiński triangle and square - pushing the limits of code to achieve extraordinary visual detail. He later built Rithmomachia, a strategy-based math game, to demonstrate his mastery of Java programming. Alex views programming not just as a technical discipline but as a medium for creativity. He has hand-coded graphic projects such as a virtual birthday card for his mother that reveals a blooming flower bouquet when opened, the game Exploding Kittens, and a three-dimensional version of the classic Snake game. Across all his projects, Alex's precision, creativity, and technical skill are unmistakable, producing programs that are both elegant and masterful.

Alex's intellectual ability is matched by his generosity and teamwork. He is one of the highest-performing students I have taught, yet he remains humble and always willing to help others. I frequently observe him assisting classmates sometimes on his own initiative and other times at mine or a peer's request. Unlike many students who simply provide answers, Alex guides his peers through the debugging process, offering subtle hints and explanations that help them discover solutions independently. This thoughtful approach not only supports his classmates but reinforces his own understanding of complex programming concepts. In group settings, Alex often takes on the most challenging tasks while ensuring his teammates feel included and capable. His collaborative spirit, patience, and clear communication have made him invaluable in my classroom.

Beyond the classroom, Alex has actively pursued his passion for programming through competitions, hackathons, and internships. He has participated in Lockheed Martin's Code Quest team programming competition and reached the Silver Division in the USA Computing Olympiad. He has also completed several internships, including one in which he was compensated for his work. Alex's journey through competitive programming and hackathons reflects his resilience and determination. After facing several early setbacks, he persevered and, at his fifth hackathon, developed a working prototype that won first place and earned him a paid internship. He was awarded the top five summer interns amongst a team of fifteen interns. These experiences gave him practical exposure to real-world software development and problem-solving, setting him apart from his peers. Alex also actively participated in the Computer Science club all 4 years and is donning leadership roles during the junior and senior years.

Alex is an exceptional student whose intellectual curiosity, creativity, and perseverance distinguish him as one of the most capable young computer scientists I have taught. His kindness, humility, and commitment to excellence ensure that he will continue to thrive both academically and personally. I am confident that he will make a meaningful contribution to society with his computer engineering and math backgrounds and is well-deserving of this scholarship.

Sincerely,

Steven Turner, MAT

Computer Science Teacher & Program Coordinator

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