2051391306 jayyk0912@gmail.com Tuscaloosa, Alabama Mathworks,

To whom it may concern,

I am excited to submit my resume for the Software Development internship program at Mathworks. Through my coursework and hands-on projects, I have developed a strong foundation in software engineering, problem-solving, and coding, and I am confident that I can be a valuable asset to your team.

As a student at the University of Alabama, I have completed rigorous coursework in areas such as Data Structures, Algorithms, and Software Design, which have equipped me with the skills needed to tackle complex programming challenges. In addition to my academic studies, I have undertaken research projects, such as working on the application of the Particle Swarm Optimization (PSO) algorithm to enhance the efficiency of underwater autonomous robots. This experience deepened my understanding of algorithm development and advanced data manipulation.

Currently, I am working on a personal project where I am developing a real-time chat application using React for the front end, Redis for managing messages, and Python for the server-side scripting. This project has pushed me to explore new technologies and optimize message handling, further strengthening my skills in software development and real-time systems. I have also extensively worked on Mathworks for simulation modelling for my club.

I am eager to contribute to Mathworks by bringing my technical expertise, attention to detail, and passion for developing efficient, scalable software solutions. I am confident that this internship will provide me with invaluable real-world experience in the technology industry and help me further refine my skills.

Sincerely, Jay Kumar Roy