SHAMBHURAJ MANE

✓ samane@wpi.edu

in shambhuraj-mane- *J* 774.535.0532

Worcester, MA

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Dear Hiring Manager,

My name is Shambhuraj Mane and I am a Robotics Engineer from the Worcester Polytechnic Institute, MA, USA. I am writing to express my strong interest in securing a summer internship. As a dedicated and highly motivated student, I am excited about the opportunity to gain hands-on experience and contribute to the success of your organization.

My robotics journey began in undergraduate studies when I started working in the Product Innovation lab and continued for three years. During this time, I received Arduino, C++, Python, Solidworks and 3D printing and scanning training, worked on several robotics projects, and served as Product Manager of a lab for a year. It built my passion for Robotics. Since then, my journey with robotics has involved securing 4 associates and 3 professional Dassault certification in Solidworks CAD design, publishing a research paper on "Real time cloud sensing using a data acquisition module installed on drones" and working on different robotics projects. Currently I am working on conflict based search algorithms for multiagent path finding application in warehouse management, the simulation is performed using ros2, gazebo, ros2_control and nav2. I believe this experience exhibits my ability to engage with stakeholders, identify problem statements, think critically and build and solve problems.

My interests lie in engineering and development of mobile robotics, Computer Vision and Perception. My expertise comprises forward and inverse kinematics for a robot, motion planning algorithms, programming arduino and raspberry pi development boards, and building robotics applications in the ROS/ROS2 framework. In addition, my work with the Bionic arm project at the PI lab complements my skill set for roles involving Machine learning such as data collection, data cleaning, feature extraction, model building and evaluation. My programming strengths involve writing quality code in Python libraries such as Pandas, PyTorch, TensorFlow, OpenCV, Scikit-Learn and Numpy.

The most important capability apart from my technical skill set is my affinity to solve challenging problems in collaboration with others, which is to say that I am a team player. However, when required, I have led successful projects and played a leadership position in organizations in the past. With this I submit to your fine sense of judgement to take a decision on my application.

Kind Regards,

Shambhuraj Mane **Applicant**