

Shivam Sharma

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WORK EXPERIENCE

ANALOG DEVICES INC., Mechatronics engineer

Jan 2025 - Present



Automated semiconductor fab by using advance computer vision and critical decision making. Applied object detection, recongition and pose estimation to increase the FAB throughput. Built vision pipeline to process image and accurately move robot for pick and place,



IPAWTROL, Computer Vision Engineer

May 2024 - Aug 2024

Calibrated intrinsic and extrinsic camera parameters for stereo and an IMU sensor on quadruped. Developed CUDA accelerated high throughput ROS 2 driver for stereo camera. Implemented visual SLAM and obstacles avoidance for quadruped for home security

DANFOSS INFO SOLUTIONS, Robotics Engineer

May 2023 - July 2023



Designed advanced path planning algorithm for autonomous vehicle. Optimized path length and speed using path planner leading to 45 % reduction in path curvature. Devised multithreaded obstacle avoidance software utilizing lidar data, achieving a 40% increase in memory efficiency.

EDUCATION

MSC. ROBOTICS ENGINEERING

August 2021 - December 2023



Worcester Polytechnic Institute

Learned and excelled in Computer vision, Robot control, Motion planning and On-device deep learning. Designed complex team based projects for each course that automated industry tasks and develop teamwork skills.

B.TECH MECHANICAL ENGINEERING

July 2017 - July 2021



National institute of technology, Kurukshetra

Learned fluid mechanics, thermodynamics, strength of materials, CAD, machine design, and computer and Matlab programming. Completed internship at Maruti Suzuki for supply chain management as final year project.

Class X & XII – CBSE Kendriya Vidhyalaya 2014, 2016

Class X: CGPA 9.6/10 | Class XII: 92%

SKILLS & INTERESTS

Languages Technical Skills

HindiNativePythonComputer vision, automation, ROS 2EnglishProfessionalC++High-performance robotics softwareROS 2Drivers, perception pipelines, SLAM

OpenCV/PyTorch Detection, pose estimation, calibration

Interests

Tennis Competitive play, endurance training **Fitness** Strength training, conditioning

Robotics Autonomous systems, vision based hand manipulation