Ayush Goel

Delhi, India | LinkedIn | Github | (+91) 99909 64681 | ayush.goel2427@gmail.com

EDUCATION

Thapar Institute of Engineering and Technology   **Punjab, India**
BE in Mechatronics Engineering (CGPA: 9.29)   *June 2018*
- Awards: Certificate of Merit for 3 consecutive years
- Achievements: 3RD rank in Undergrad, Merit-based Scholarship for all 4 years

Lancer's Convent   **Delhi, India**
High School (Percentage: 91.6%)   *March 2014*

WORK EXPERIENCE

Unicommerce eSolutions Pvt. Ltd.   **Haryana, India**
Senior Software Development Engineer   *Aug. 2019 - Present*
- Hired and mentored new team members to fulfill 80% more business requirements per sprint.
- Integrated and maintained over 50 e-commerce marketplaces and logistic providers with the core product through REST APIs and Spring.
- Spearheaded integration of International marketplaces like Lazada and Shopee, establishing the company's presence in 7 middle-eastern regions.
- Awards: Above and Beyond Call of Duty (ABCD) Award
- Tech stack: Spring, Java, Mongo, SQL, Zookeeper, ActiveMQ

Capgemini India Pvt. Ltd.   **Maharashtra, India**
Senior Software Engineer   *Sept. 2018 - June 2019*
- Upgraded the financial services web application of CIMB Bank, Malaysia by developing a banking project in a team of 10 to convert SOAP APIs to REST APIs.
- Planned and headed the development of Capbook, a social media web application developed using AngularJS and Spring Framework, used by over 500 employees.
- Tech stack: Spring, AngularJS, Java, REST, Yaml, Swagger

Programme in Autonomous Robotics, IIT Delhi   **Delhi, India**
Research Intern   *Jan. 2017 - July 2017*
- Developed mobile robot capable of moving autonomously in a pre-defined path or being operated remotely.   [Video]
- Worked on CAD design, stress analysis, component selection, Odometry, PID control, and GUI development of the robot. Developed and installed a 4 DoF Robotic arm with a payload capacity of 300 gm.
- Tech stack: Python, OpenCV, MATLAB, ROS, Gazebo, Solidworks

LEADERSHIP EXPERIENCE

Mechatronics and Robotics Society, TIET   **Punjab, India**
Convener   *Aug. 2017 - June 2018*
- Secured an additional Rs. 60,000 funding for the society and bought several new components.
- Organized several robotic workshops and events, with an average footfall of over 750 people.
- Organized competition, INNOVATICA, where around 25 student groups presented ideas to solve real-life problems and we helped them in the implementation.

PROJECTS

Development of Service Robot   **Aug. 2017 - Apr. 2018**
- Developed and installed a 4 DoF Robotic arm with a payload capacity of 300 gm on RoboMuse3XT.
- Implemented the ROS Navigation Stack to map the surrounding environment.
- Implemented Pattern Recognition to identify different medical equipment and developed an Android application to recognize the voice commands.

Development of Semi-Autonomous Mobile Robot (RoboMuse3XT)   **Jan. 2017 - July 2017**
- Developed a Semi-Autonomous mobile robot from scratch capable of being operated remotely or autonomously in a pre-defined path.
- Incorporated the capabilities of live video surveillance and face recognition to enhance security.
- The robot is cheap and flexible, and has implementations in several domains: surveillance, industries, research.

Image Projection   **Jan. 2017 - July 2017**
- Implemented the concepts of Projective Geometry and Hemographies to project an image onto a scene in a natural way that respects perspective.   *[Video]*
- Used Tracking and Pose Estimation to implement a simple augmented reality application.

Development of Semi-Autonomous Mobile Robot (RoboMuse3XT), IITD   **Jan. 2017 - July 2017**
- Developed a Semi-Autonomous mobile robot from scratch capable of being operated remotely or autonomously in a pre-defined path.

TECHNICAL SKILLS

Languages: C, C++, Python, Java, MATLAB
Operating systems: Linux, Windows, Unix
Software: VCS (Git), ROS 1&2, Gazebo, Solidworks, Android Studio, ActiveMQ, Zookeeper, SQL
Libraries: OpenCV, PyTorch, Sklearn, NumPy, pandas, Matplotlib
Hardware: RaspberryPi, Cameras, NVIDIA Jetson, Arduino, PLCs, Sabertooth, Kinect

EXTRA-CURRICULAR ACTIVITIES

- Volunteer, Pratigya Society - provided elementary knowledge to underprivileged children
- Volunteer, SIYAHHI - an initiative towards environment protection
- Convener, Mechatronics and Robotics Society, TIET, India
- Member of Organizing Committee, 3RD International Conference on Advances in Robotics held at IIT Delhi
- Co-Convener, Mechatronics and Robotics Society, TIET, India
- Technical Head, Mechatronics and Robotics Society, TIET, India
- Participated in Tryst - Technical Fest, IITD, India

COURSES AND CERTIFICATIONS

- Autonomous Mobile Robots (ETH Zurich)   *Certificate*
- Robotics Specialization (University of Pennsylvania)   *Certificate*
- ROS for Beginners: Basics, Motion and OpenCV (Udemy)   *Certificate*
- ROS for Beginners II: Localization, Navigation and SLAM (Udemy)   *Certificate*

- Machine Learning (Stanford University)   *Certificate*
- Machine Learning A-Z™: Hands-On Python & R In Data Science (Udemy)   *Certificate*
- Python For Everybody Specialization (University of Michigan)   *Certificate*