Professional Summary

Results-driven Software Engineer with 8+ years of experience in industrial automation, robotics, and haptics. Proven track record of successfully leading projects and teams, with a strong background in Mechanical Engineering (Robotics, Haptics, and Teleoperation) from a prestigious university. Skilled in management, project planning, and a wide range of technical skills including programming languages, software, and tools.

Professional Experience

Senior Software Engineer (ED09)

Inazuma.co | January 2020 - Present

Software Engineer (ED07)

Korea Robotics Inc. | June 2018 - December 2019

Key Achievements:

- Developed and implemented a robotic arm control system using C++, resulting in a 30% increase in production efficiency.
- Successfully led a team in designing and deploying a haptic feedback system for a VR application, receiving a 95% user satisfaction rate.

Responsibilities:

- Designed and developed software for industrial robots and haptic devices
- Collaborated with the QA team to identify and resolve software issues
- Participated in project planning and commissioning of automation systems

Junior Software Engineer (ED05)

Mechatronics Solutions Ltd. | March 2016 - May 2018

Key Achievements:

- Created a PLC program for a manufacturing line, reducing downtime by 25%
- Assisted in the development of a machine vision system using OpenCV, achieving a 90% accuracy rate

Responsibilities:

- Assisted in software development for automation projects
- Conducted troubleshooting and maintenance of existing systems
- Participated in project meetings and contributed to project planning

Research Assistant

Robotics Research Institute, Korea University of Technology and Education | September 2014 - February 2016

Key Achievements:

- Contributed to the development of a robotic exoskeleton project, presenting research at an international conference
- Assisted in the design and implementation of a haptic feedback system for a robotic arm

Responsibilities:

- Assisted in research projects related to robotics and haptics
- Developed and tested software for research prototypes
- Collaborated with researchers to publish papers and present at conferences

Education

Master's in Mechanical Engineering (Robotics, Haptics, and Teleoperation)
Korea University of Technology and Education | February 2016

Technical Skills

Programming Languages:

- C++
- Java
- Python
- C#
- Visual C++

Software and Tools:

- Microsoft Office
- Matlab
- SolidWorks
- AutoCAD
- WordPress
- Photoshop
- Keil
- Proteus
- Mplab

Automation and Robotics:

- PLC Programming
- Robot Operating System (ROS)
- MoveIT
- Point Cloud Library (PCL)
- SLAM
- Machine Vision Using Matlab
- Gazebo
- Pointcloud
- LiDAR

Management and Collaboration:

- Project Planning
- Project Management
- Teamwork
- Management
- Commissioning
- Troubleshooting