

## Job Detail

Staff Level

Position Title	Robot motion analysis/control experts and engineers aiming to become experts
Recruiter Company	iHOLON Co.,Ltd
Company Name	Company name is private
Activated / Updated	2024-05-13 / 2024-05-13
Job Type	Manufacturing (Automobile/Plant Engineering/Precision Equipment) - Other Electronics (Appliance/Semiconductor) - Other
Industry	Machinery Manufacturer
Location	Asia Japan Kanagawa
Job Description	<ul style="list-style-type: none"> <li>• You will be responsible for mechanical analysis/motion analysis and control design using Matlab/Simulink, as well as real-time SW implementation. For those who have no experience using the tool, we will provide a detailed lecture.</li> <li>• Analysis and implementation of arm/walking robot posture calculation, gravity calculation, inertia calculation, trajectory trajectory planning, motion prediction, etc.</li> <li>• In order to achieve dexterous hand movements when using tools and supply body movements, please proceed with the design by referring to the movements of people and animals, based on a method called biomechanics.</li> <li>• Utilizing spatial information and object shape information reconstructed from robot vision and sensors, we will explore ways to determine optimal movements in conjunction with reinforcement learning/imitation learning, etc.</li> </ul>
Company Info	<p>This is an environment where you can take on the challenge of developing humanoid robots ahead of future trends.</p> <p>Here you will find exciting experiences and opportunities for growth that can only be found at a start-up company.</p> <p>We are looking for friends who will be passionate about it, expand unknown possibilities, and create the future together!</p>
Qualifications	<p>[MUST]</p> <ul style="list-style-type: none"> <li>• There should be no resistance to geometric operations such as moving and rotating the coordinate system, matrix operations, and differential and integral operations.</li> <li>• Be confident in your spatial recognition abilities</li> <li>• Ability to work on multi-level real-time implementation</li> </ul> <p>[Welcome (WANT)]</p> <ul style="list-style-type: none"> <li>• Experience implementing kinematics on your own (forward kinematics/inverse kinematics), experience implementing dynamics, experience implementing statics (gravity compensation)</li> </ul> <p>We will give preferential treatment if you are good at coordinate transformation such as mass point distribution.</p> <ul style="list-style-type: none"> <li>• Preference will be given to those who have implementation experience and knowledge of impedance control and compliance control design.</li> <li>- Preference will be given to those with experience and knowledge of implementing predictive control and time series forecasting.</li> <li>• Preference will be given to those with experience and knowledge in implementing high-gain robust control such as optimal servo control theory and high-order sliding mode control theory.</li> </ul>
Japanese Level	Business Level(JLPT Level 2 or N2)
Salary	Depends on experience