

NCS-Based KAIST Job Description – Research

Recruitment Area	Research Position	분류체계	대분류	중분류	소분류	세분류
			모 집 분 야 : Researcher position 세부모집분야 : Indoor positioning and its application			
Founding Philosophy	<ul style="list-style-type: none"> ○ Korea Advanced Institute of Science and Technology (KAIST) Act - Educating outstanding talent proficient in theory and practice as required in the fields of science and technology for industrial development - Carrying out the nation's mid- and long-term R&D, and basic and applied research to foster national competitiveness in science and technology - Providing comprehensive support to research conducted by other research centers and industries 					
KAIST's major businesses	<ul style="list-style-type: none"> ○ Education: Fostering creative talent, strengthening convergence education, nurturing global leaders in science and technology, strengthening human resource capacity ○ Research: Support for development of outstanding research projects, acquisition of specialized researchers, advancement of entrepreneurial culture, creation of high value-added intellectual property rights, promotion of technology transfer/commercialization, and development of large-scale, leading projects ○ Cooperation: Creating a working environment to be at par with global standards, and multifaceted cooperation for global leadership ○ Administration: Provision of administrative and technical service for international students/faculty (Support for operation of a "Korean-English bilingual campus") 					
Growth engines	<ul style="list-style-type: none"> ○ Vision: Global Value-Creative World-Leading University - Hub for Fostering Knowledge Creation and Global Convergence Talents - Center for the World-Leading New Knowledge and Technology) ○ Five innovation initiatives: Innovation in education, research, technology commercialization, globalization and future strategies ○ 3C Leadership: Change, Communication, Care 					
Duties and responsibilities	<ul style="list-style-type: none"> ○ PCB design and fabrication ○ PCB design validation ○ Wireless signal collection ○ Positioning server construction and communication ○ Research support 					
Job performance details	<ul style="list-style-type: none"> ○ Design and manufacture of dedicated indoor positioning hardware ○ Hardware exterior design and production ○ Design and implement Wi-Fi fingerprints collection algorithm through dedicated hardware for indoor positioning ○ Establishment of indoor positioning server and communication with dedicated hardware ○ Operation and demonstration of indoor positioning services 					
Required knowledge	<ul style="list-style-type: none"> ○ Bachelor's degree in electrical engineering, computer engineering or computer science, or equivalent experience 					

	<ul style="list-style-type: none"> ○ Experience in making 3D design using 3D CAD ○ Electric/electronic, sensor, electronic circuit, electronic control, electric/electronic/control, electronic R&D, circuit, wireless, electric circuit ○ Internal/external IP integration and network system construction experience
Required skills	<ul style="list-style-type: none"> ○ Statistical analysis (R, MATLAB) ○ Verilog, System Verilog, digital simulation and various verification tools (Cadence/Synopsys/Mentor Graphics) ○ Script languages such as shell, tcl, perl, Python, and makefile ○ Configuration management system (Git, CVS, ClearCase, Perforce, etc.) ○ Proficiency in basic languages to execute test plans such as UVM and C/C++
Attitude while performing duties	<ul style="list-style-type: none"> ○ Objective and logical attitude ○ Responsible attitude to complete entrusted tasks ○ Being cooperative with other members ○ Creative
Basic skills	<ul style="list-style-type: none"> ○ Communication skills, problem-solving skills ○ Interpersonal ability, professional ethics
Reference site	<p>www.ncs.go.kr, www.kaist.ac.kr</p>