한국과학기술원 NCS 기반 직무기술서_시간제위촉연구원

채용분야	연구직	분류체계	대분류	중분류	소분류	세분류
			15. 기계	01. 기계설계	02. 기계설계	04. 기계제어설계
설립이념	○ 한국과학기술원법 - 깊이 있는 이론과 실제적인 응용력으로 국가 산업 발전에 기여할 고급 과학기술 인재 양성 - 국가 정책으로 추진하는 중장기 연구 개발과 국가 과학기술 저력 배양을 위한 기초응용 연구 수행 - 각 분야 연구 기관 및 산업계와 연계한 연구 지원					
KAIST 주요사업	○ Education: 창의적 인재 육성, 융합교육 강화, 글로벌 과학기술 리더 양성, 교육인적 역량 강화 ○ Research: 우수 연구 과제 발굴 지원, 특성화된 연구인력 확보, 창업문화 선진화, 고부가가치 지적재산권 창출 및 기술이전/사업화 촉진, 선도적 대형과제 발굴 ○ Cooperation: 국제적 수준의 근무 환경 조성, 글로벌 리더십을 위한 다양한 협력 ○ Administration: 외국인 학생·교원 대상 행정·기술 서비스 제공(Bi-lingual Campus 운영 지원)					
성장 동력	○ Vision: 글로벌 가치창출 세계 선도대학(Global Value-Creative World-Leading University) - 지식창조형 글로벌 융합인재 양성 허브 (Hub for Fostering Knowledge Creation and Global Convergence Talents) - 세계적 신지식 신기술 창출 진원지(Center for the World-Leading New Knowledge and Technology) ○ 5대 혁신: 교육혁신, 연구혁신, 기술사업화혁신, 국제화혁신, 미래전략혁신 ○ 3C Spirit: Challenge, Creativity, Caring					
담당 업무	○ 학습 기반 지능형 제어기술 개발 ○ Unmmaned ground vehicle (UGV) 학습 시뮬레이션 구축					
직무수행 내용	○ 학습기반제어 관련 국내외 최신 기술 동향 조사 및 분석 ○ 학습 기반 지능형 제어 알고리즘 개발 및 검증 지원 ○ Unmmaned ground vehicle 실험 및 시뮬레이션 지원					
필요지식	○ 제어공학, 기계학습					
필요기술	○ 제어 시스템 설계 기술 ○ 시뮬레이션 및 실험 구축 기술					
직무수행태도	○ 과학자로서의 지식 탐구욕 ○ 공학자로서의 직무에 대한 책임감 ○ 과제와 연구 수행에 대한 리더십 ○ 문제 해결법에 대한 통찰력 ○ 원칙을 준수하고 청렴하며 공정한 업무 처리 태도					
직업기초능력	○ 직업윤리, 문제해결능력, 정보능력, 기술능력, 의사소통능력, 수리능력, 조직이해능력					
참고사이트	www.ncs.go.kr, www.kaist.ac.kr					

NCS-Based KAIST Job Description – Research position

<table>
<tr><td rowspan="2">Recruitment area</td><td rowspan="2">Researcher</td><td rowspan="2">Classification system</td><td>Parent category</td><td>Sub-category</td><td>Sub sub-category</td><td>Sub sub-sub-category</td></tr>
<tr><td>15. Machinery</td><td>01. Mechanical Design</td><td>02. Mechanical Design</td><td>04. Mechanical Control System Design</td></tr>
<tr><td>Mission</td><td colspan="6">○ 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</td></tr>
<tr><td>KAIST's major businesses</td><td colspan="6">○ 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")</td></tr>
<tr><td>Growth engines</td><td colspan="6">○ 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</td></tr>
<tr><td>Duties and responsibilities</td><td colspan="6">○ Development of learning-based intelligent control technologies
○ Development of simulation environments for learning-based control of unmanned ground vehicles (UGVs)</td></tr>
<tr><td>Job performance details</td><td colspan="6">○ Review and analysis of the latest technological trends in learning-based control
○ Support for the development and validation of learning-based intelligent control algorithms
○ Support for UGV experiments and simulations</td></tr>
<tr><td>Knowledge required</td><td colspan="6">○ Control engineering and machine learning</td></tr>
<tr><td>Required skills</td><td colspan="6">○ Skills in control system design
○ Skills in developing simulation environments and experimental setups</td></tr>
<tr><td>Attitude while performing duties</td><td colspan="6">○ Intellectual curiosity as a scientist
○ A strong sense of professional responsibility as an engineer
○ Leadership in research and project execution
○ Insight into effective approaches to problem solving
○ Integrity, fairness, and adherence to professional principles</td></tr>
<tr><td>Basic skills</td><td colspan="6">○ Professional ethics, problem-solving skills, information literacy, technical skills, communication skills, numeracy, and organizational awareness</td></tr>
<tr><td>Reference site</td><td colspan="6">www.ncs.go.kr, www.kaist.ac.kr</td></tr>
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