한국과학기술원 NCS 기반 직무기술서-연수연구원

<table>
<tr><td rowspan="4">채용분야</td><td rowspan="4">연구직</td><td rowspan="4">분류체계</td><td>대분류</td><td>중분류</td><td>소분류</td><td>세분류</td></tr>
<tr><td rowspan="3">14. 건설</td><td rowspan="3">06. 도시·교통</td><td>02. 교통계획·설계</td><td>01. 교통계획</td></tr>
<tr><td></td><td>02. 교통설계</td></tr>
<tr><td>04. 지능형교통</td><td>02.지능형교통체계(ITS) 개발 및 구축</td></tr>
<tr><td>설립이념</td><td colspan="6">○ 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</td></tr>
<tr><td>KAIST
주요사업</td><td colspan="6">○ 교육: 과학기술 글로벌 인재 양성
○ 연구: 인류 난제 해결을 위한 연구
○ 국제화: 글로벌 리더십 역량 강화
○ 창업: 창업혁신 생태계 구축 및 발전</td></tr>
<tr><td>성장 동력</td><td colspan="6">○ Vision : 국가와 인류, 지구를 위한 독특한 빛깔의 세계 10위권 대학
○ Mission: 인류의 행복과 번영을 실현하는 과학기술혁신대학
○ QAIST: 창의인재, Post AI 융복합 연구, 글로벌 인재, 기술가치창출, 소통의 신뢰
○ 3C Spirit : Challenge, Creativity, Caring</td></tr>
<tr><td>담당 업무</td><td colspan="6">○ 교통신호 최적화 알고리즘 개발
○ 교통 시뮬레이션</td></tr>
<tr><td>직무수행
내용</td><td colspan="6">○ 도로 환경을 고려한 교통신호 최적화 알고리즘 개발 및 시뮬레이션 기반 검증</td></tr>
<tr><td>필요지식</td><td colspan="6">○ 교통계획과 관련된 기본 지식
○ 최적화에 대한 기본 지식</td></tr>
<tr><td>필요기술</td><td colspan="6">○ 컴퓨터 언어 코딩 프로그래밍 기술
○ 통계자료 분석과 결과에 대한 해석 기술
○ 영어 독해 및 쓰기
○ 프로젝트 관리</td></tr>
<tr><td>직무수행태도</td><td colspan="6">○ 연구자 윤리의식
○ 교통현황에 대한 종합적 이해
○ 융합연구
○ 협업 태도</td></tr>
<tr><td>직업기초능력</td><td colspan="6">○ 자원관리능력
○ 의사소통능력
○ 문제해결능력
○ 정보분석능력</td></tr>
<tr><td>참고사이트</td><td colspan="6">www.ncs.go.kr, www.kaist.ac.kr</td></tr>
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NCS-Based KAIST Job Description – Postdoctoral researcher

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<tr><td rowspan="3">Recruitment area</td><td rowspan="3">Research position</td><td rowspan="3">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 rowspan="2">14.Construction</td><td rowspan="2">06.City and transportation</td><td rowspan="2">02.Traffic planning and design</td><td>01.Transportation planning</td></tr>
<tr><td>02.Traffic design</td></tr>
<tr><td colspan="3"></td><td></td><td>04. Intelligent transportation</td><td>02. Intelligent Transportation System(ITS) development and construction</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 traffic signal optimization algorithm
○ Traffic simulation</td></tr>
<tr><td>Job performance details</td><td colspan="6">○ Development of traffic signal optimization algorithm considering road environments and verification of its performance using traffic simulation</td></tr>
<tr><td>Knowledge required</td><td colspan="6">○ Basic knowledge of transportation planning
○ Basic knowledge of optimization</td></tr>
<tr><td>Required skills</td><td colspan="6">○ Computer programming language
○ Statistics analysis and interpretation
○ English reading and writing
○ Project management</td></tr>
<tr><td>Attitude while performing duties</td><td colspan="6">○ Ethics of research
○ A Comprehensive understanding of traffic conditions
○ Convergence research
○ Cooperative attitude</td></tr>
<tr><td>Basic skills</td><td colspan="6">○ Resource management capability
○ Communication skills
○ Problem-solving ability
○ Analytical skills</td></tr>
<tr><td>Reference site</td><td colspan="6">www.ncs.go.kr, www.kaist.ac.kr</td></tr>
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