

Stanford University

Senior Research Scientist - Smart City Mobility And Vehicle Infrastructure Interaction

Incheon, Korea - Full Time

The Stanford Center at the Incheon Global Campus (SCIGC) is Stanford University's sole research entity operating in the Republic of Korea.

Job Purpose

Apply your comprehensive knowledge and understanding of a scientific discipline or related technology related to smart and sustainable cities. Represent the senior level providing technical leadership and typically apply advanced knowledge of the principles, concepts, and methods to large, complex research projects.

CORE DUTIES

- Provide leadership and coordination of specific research center activities.
- Research, design, and monitor key indicators to evaluate the autonomous vehicle system performance.
- Design, recommend and implement modifications to procedures and protocols in support of smart city mobility research with respect vehicle infrastructure interaction (VII).
- Lead and/or contribute to conference, journal papers, presentations, and invention disclosures related to smart city mobility and vehicle infrastructure interaction.
- Provide subject matter expertise on the intersection of smart city mobility, which may include autonomous solutions, vehicle infrastructure interaction, lightweight mobility, and human-centric modes of transportation.
- Train and direct center staff in the most difficult and complex research tasks.
- Aid in the design of new center facilities and equipment utilizing new concepts; develop, maintain, or replace equipment.
- Develop and document research center procedures; provide technical leadership interpretation of data analyses.

- Present designs, challenges, implementation details and results during periodic reviews and meetings with managers, staff, and project teams.
- Collaborate with other senior research staff and managers to identify and prioritize strategies to improve and implement research.

These duties may be amended from time to time.

MINIMUM REQUIREMENTS:

- Ph.D. in civil engineering, environmental engineering, mechanical engineering, electrical engineering, computer science, management, or a related field.
- Excellent command of the English language.
- Must be legally authorized to work in South Korea.

Desirable skills:

- Experience working in a team-based project from inception to demonstration across multiple disciplines, e.g., hardware design and implementation, data acquisition and analysis, mathematical modeling, algorithm development, application implementation, etc.
- Knowledge of and ability to apply advanced computational techniques to the area of smart city research.
- Independence in problem formulation and creativity in problem solving.
- Attention to detail and ability to manage multiple projects simultaneously.
- Eagerness to learn new technologies and applying fundamental research to real-world problems.
- Strong organizational and interpersonal skills.
- Strong communication (oral and written) skills.

A highly ambitious and motivated individual will have the opportunity to lead the development of independent research ideas and will be encouraged to develop research proposals and apply for grants in collaboration with other senior staff.

The Stanford Center at the Incheon Global Campus (SCIGC) is Stanford University's flagship research center operating in the Republic of Korea. As a top-tier, global research institution in the heart of Silicon Valley, Stanford has a long history of international collaboration through research, education, and engagement. SCIGC, located in Songdo-dong, Yeonsu-gu, Incheon, is at the center of Stanford's growing interactions with South Korea and Asia. Branching across seven schools and many research institutes, SCIGC is a Stanford-wide interdisciplinary research center initially engaging in smart city technology implementation, sustainable urban systems and wellness, innovative entrepreneurship methods and business models, and sustainable development and global economic competitiveness.

Stanford is an equal employment opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other characteristic protected by law.

Related Keywords: Incheon, South Korea, scientific research, sustainability, smart city, mobility, vehicle infrastructure interaction, design, present papers, invent, autonomous solutions, lightweight mobility human-centric transportation, engineering