

Postdoctoral Fellow in Robotics, Tecnológico de Monterrey, Monterrey, Mexico.

If you want to transform lives, this is the opportunity you are looking for.

Our university is one of the Top 10 universities of LATAM and Top 50 of the private universities of the world, according to the QS World University Ranking. In addition, the Times Higher Education World University Ranking considers it #1 in Mexico and #6 in LATAM.

Our mission is to educate leaders with entrepreneurial spirit, humanistic outlook and internationally competitive. We count with an academic offer of more than 100 programs including graduate, undergraduate and high school levels.

The Research Group in Robotics of the School of Engineering and Sciences at Tecnológico de Monterrey in Mexico, in collaboration with Institute of Robotics and Intelligent Information Processing, Department of Automation, School of Electronic, Information and Electrical Engineering at Shanghai Jiao Tong University in China, invites applications for a Postdoctoral Fellow Position. The successful candidate will be engaged to develop the project entitled Cooperation between rotorcraft UAV and Surface marine robot: Robust control, visual servoing, localization and navigation. The objective is the establishment of a cooperative strategy between a multi-rotor Unmanned Aircraft System UAS and an Unmanned Surface Vehicle USV by integrating various disciplines such as robust control to guarantee stability under perturbed environments, localization based on sensor fusion, vision, navigation and visual servoing. The aforementioned in order to increase capacity and advantages of both autonomous vehicles to deal with marine tasks such as inspection and monitoring of fixed and mobile marine platforms, ships, ecological monitoring and marine exploration. The candidate will be working in close collaboration with Dr. Herman Castañeda, Professor of the Tecnológico de Monterrey, and with Dr. Hesheng Wang, professor of the Shanghai Jiao Tong University. The selected researcher should be willing to conduct his research by living in Mexico, and at some shorter times in China.

Qualifications

- PhD in Electrical engineering, Robotics, Mechanical, Artificial Intelligence o related areas (preferably degree granted in 2016 or upwards)
- Strong scientific production (JCR Journals and/or international conferences)
- Strong programming background such as Matlab, C++, ROS, Python, etc.
- Background in Robotics, Nonlinear Control and Computer Vision
- Excellent oral and writing skills in English

Tecnológico de Monterrey, the leading private university in México, continues strengthening and renewing the commitment with its research strategy, making research an institutional priority to: significantly contribute to the quality of its teaching-learning process (Educate), transform the scientific and technological knowledge into innovative solutions that benefit society (Innovate) and transform, through knowledge generation and transfer, impacting the community in economic, political and social aspects. Aimed to fulfill these objectives, Tecnológico de Monterrey has designed an action-research model, named Research that Transforms Lives, based on a collaborative, interdisciplinary and open innovation ecosystem, with participation of researchers, teachers, professional and graduate students. Research that Transforms Lives objective is to be and engine that generates innovative solutions for the economic and social development of México. 40 Research Groups with Strategic Focus have been established where the scientific activity starts from a specific challenge, which is connected with a discipline and, more precisely, connected with specific topics and approaches. The entire scientific publication effort is done having in mind an

application context, either to support the productive sector or to satisfy the communities' social demands on issues such as health, food, education, housing, transportation, business, public policy, among others.

Shanghai Jiao Tong University (SJTU), as one of the higher education institutions, which has a long history and a world-renowned reputation in China, is a key university directly under the administration of the Ministry of Education (MOE) of the People's Republic of China and co-constructed by MOE and Shanghai Municipal Government. Through 121 years' unremitting efforts, SJTU has become a comprehensive, research-oriented, and internationalized top university in China. By December 2016, SJTU has had 28 schools/departments, 21 research institutions, 13 affiliated hospitals, 2 affiliated medical research institute, 12 directly affiliated units and 6 directly affiliated enterprises, with 16,195 undergraduates and 30,270 postgraduates (14,374 master degree candidates and 6,719 doctorate degree candidates), 2,401 overseas students. The university faculty includes 2,835 full-time teachers (among which 891 are professors), 22 members of Chinese Academy of Sciences, 24 members of Chinese Academy of Engineering.

At Tec de Monterrey we work under a principle of EEO and do not discriminate on the basis of age, ethnicity, nationality, gender, sexual orientation, marital status, health status, religious beliefs, political doctrine or disability.