DIETI UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II
DIPARTIMENTO DI INGEGNERIA ELETTRICA E TECNOLOGIE DELL'INFORMAZIONE

PROF. ING. FANNY FICUCIELLO
ASSOCIATE PROFESSOR OF CONTROL AND ROBOTICS
VICE-DIRECTOR OF THE ICAROS CENTER

POST DOC CALL

[Jobs] Post Doc Opportunity at University of Naples Federico II: Supervised autonomy and shared-control of surgical robots

Dear Colleagues,

We are searching for a Post Doc to join the PRISMA group at the University of Naples Federico II to work in the field of Surgical Robotics.
The grant is on the "Supervised autonomy and shared-control of surgical robots".
The candidate will work with the Medical Robotics Team of the PRISMA group on several European and National projects and will have the opportunity of interacting with a recognized network of experts in the fields of robotics and machine learning. More information on the position can be found in the following.

Required skills
1. Strong Programming Skills
Robotics developers need to have a solid understanding of computer programming languages such as C++, Python, and Java. It is also helpful to have experience with robotics-specific libraries, ROS (Robot Operating System) and OpenCV (Open Computer Vision) are the popular ones.
2. Control Theory Knowledge
The candidate should work on specific setups, in primarily on the da Vinci Research Kit and also on Collaborative robot manipulators. Teleoperation control, haptic-based shared-control, adaptive control and model predictive control, vision-based control are among controllers that will be used to realize automatic suturing, cutting and complex tasks with supervised autonomy
3. Computer Vision and Machine Learning
This includes knowledge of algorithms, data structures, and computer architecture. The candidate should also be familiar with the principles of machine learning and artificial intelligence, as these technologies are increasingly being used in robotics to advance control strategies with respect to the state of the art.

via Claudio 21, 80125 Napoli ● tel 081 7683916 ● fanny.ficuciello@unina.it ● http://wpage.unina.it/fanny.ficuciello/

4. Problem-solving Skills
Robotics projects mostly involve complex, multi-disciplinary problems which require creative and analytical thinking to solve. Being a robotics developer, you should be able to break down a problem into smaller, more manageable pieces and develop a plan to solve it. The candidate should also be able to identify and troubleshoot problems that arise during the development process.
5. Collaboration and Communication
Good communication skills, both verbal and written, are essential for explaining technical concepts to non-technical team members and for presenting findings to clients or stakeholders.
6. Creativity
Robotics is a rapidly evolving field, and the best robotics developers are those who are able to think outside the box and come up with creative solutions to challenges. As a robotics developer, the candidate should be willing to experiment and try new approaches in order to push the boundaries of what is possible.
7. Attention to detail
Robotics projects require a high level of precision and attention to detail. This includes ensuring that the code is well-written and organized, that the hardware is properly assembled and tested, and that the robot is functioning as intended.

Important dates
Application deadline: 7th December 2023

Place: Medical Robotics Lab, Department of Electrical Engineering and Information Technologies, University of Naples, Italy

Contacts
For any doubt or questions, please contact Prof. Fanny Ficuciello (fanny.ficuciello@unina.it) and Prof. Bruno Siciliano (bruno.siciliano@unina.it).