

# Call for interest: Mechanical/Mechatronics Engineer

## Topic: Mechanical design of robots for biomedical applications

The Research Unit of Advanced Robotics and Human-Centered Technologies – CREO Lab (head: Prof. Loredana Zollo) of Università Campus Bio-Medico di Roma (<u>www.unicampus.it</u>) is seeking for a highly motivated Mechanical/Mechatronics Engineer interested in working in multidisciplinary research projects for the design of novel robots and/or robotic components for bioengineering.

Possible application fields include (but are not limited to):

- Robots for automated biotech laboratories;
- Compliant mechanisms, actuators and transmissions for exoskeletons;
- Low-cost bionic hand prostheses;
- Soft steerable catheters for interventional cardiology.

Interested candidates should hold a solid background in Mechanical and/or Mechatronics Engineering for biomedical applications. Previous experience in robotics design is a plus. Strong technical reporting skills (Italian and English) are also required. Proactivity and motivation in learning new skills as well as creativity will be strongly appreciated.

#### Responsibilities:

- Design of mechanical/mechatronic components for robots in the bioengineering field;
- Design/selection of novel actuation solutions;
- Design of mechanisms and mechanical transmissions:
- Development of proof-of-concept mechanical/mechatronic prototypes and of advanced devices;
- · Reporting of design/development results.

#### Basic qualifications:

- MS in the area of Mechanical Engineering (preferred), Mechatronics Engineering, Aerospace Engineering or Biomedical Engineering;
- Advanced knowledge of CAD/FEM software (Inventor and Nastran preferred);
- Knowledge of Matlab programming;
- Fluency in English.

### Appreciated plus:

- Experience in robotics design;
- Experience in compliant mechanisms and soft robotics;
- Experience with additive manufacturing technologies.

One or more appointments will be made, depending on the number of successful candidates.

For further information and to submit the application (subject: Mechanical/Mechatronics Engineer; attachment: cover letter and CV), please refer to the following contacts:

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