Postdoctoral Fellow in bioengineering, University of Arizona, College of Medicine

Position Purpose:
Candidate will assist supervisor in developing innovative approaches for human performance analysis and outcome evaluation based on wearable sensors technology, signal processing, and simplified biomechanical models of the human body. Individual will also be responsible for assisting faculties at the University of Arizona (UA), interdisciplinary Consortium for Advanced Motion Performance (iCAMP) with the preparation of medical/health grant applications to federal and not for profit agencies. Additionally the candidate will assist with collection of clinical and investigational human performance assessments within iCAMP.

Essential Duties and Responsibilities:
Assist with development of new techniques for assessing how people move and interact with their worlds via body worn sensors. Conduct human performance assessments within laboratory or clinical affiliations.

Required Education and Experience:
PhD in electrical engineering, computer science, biomedical engineering, mechanical engineering, kinesiology or related field before job starts.

Required Knowledge, Skills and Abilities
• Demonstrated knowledge, skills and experience in signal processing and programming
• Excellent verbal and written communication skills
• Ability to work independently and as part of a team
• Ability to communicate with a range of personnel from both industrial and research environments
• Project management skills, including the ability to manage competing priorities and excellent time management skills
• Experience in using Matlab.
• Ability to collect and analyze data
• Ability to work productively with diverse populations; show respect and sensitivity for cultural differences
• Ability to travel including international travel.

Preferred Knowledge, Skills and Abilities
• Knowledge, skills and experience in general signal processing
• Experience in the area of wearable technologies and mobile health
• Experience in the area of game design.
• Experience in designing mobile app.
Typical Physical Demand and Working Conditions
Selected candidate must possess the mental and physical capability to perform the essential functions of the position with or without reasonable accommodations. Work environment is typical office, clinic and gait laboratory. Work is of light physical demand with duties performed while sitting, standing or occasionally stooping with some movement and lifting of boxes with consumables. Position requires sitting at a desk for prolonged periods of time. Position requires ability to travel including international travel.

Application Procedures:
To apply for this position, email your cover letter, resume or curriculum vitae that includes contact information of three professional references to bnajafi@surgery.arizona.edu. The title (Postdoctoral Fellow) must be indicated in the “subject” line.

About iCAMP: Wearable devices and sensors for healthcare applications is a fast growing field and UA has strength in this area. The UA-based Interdisciplinary Consortium on Advanced Motion Performance (iCAMP) has unique expertise in the translation of wearable technology, embedded technology, mobile health (mHealth), and personalized medicine for more accurate health status assessment of patients in their natural environment where they’re the most comfortable and active. One of iCAMP’s research goals is to better understand how people move through their environment and to fundamentally change the way we objectively measure function and quality of life across disciplines. The iCAMP team has pioneered many innovative technologies and some of our bioengineering products have already led to patents and were translated to industries for commercialization. Find more information at http://surgery.arizona.edu/iCAMP

Additional Information

Keywords: PostDoc, Biomedical, Biomechanics, Bioinstrumentation, kinesiology, elderly care, diabetes care.

Standard Pre-Employment Screening:
The University of Arizona conducts pre-employment screening for all positions, which includes a criminal background check, verification of academic credentials, licenses, certifications, and work history.

This position is non-security sensitive and requires a name-based criminal background check