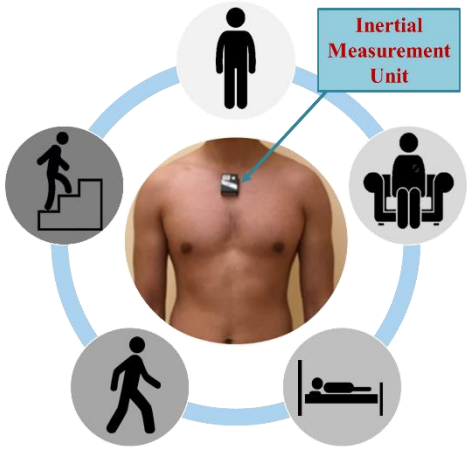
CSME 2018 Workshop

Development of wearable biomedical devices: Technology development to clinical implementation

Summary:
Wearable systems are currently available in the form of smartwatches, and are used to measure the general level of physical activity for entertainment and fitness purposes. However, the clinical application of these technologies has been rare. This workshop shows an approach to evolve the application of wearable technologies from entertainment and fitness to biomedical domains and target new markets. In this workshop, a procedure for technology development from a "clinical need for a technological concept" to "clinical implementation of the developed technology" will be presented together with examples of clinical applications such as evaluation of neurological and orthopedic conditions.



Program:
This workshop will take 2.5 hours and includes a lecture about a systematic approach to technology development toward clinical applications, a practical demo of examples of the developed technologies, and open discussion with the audience.

Learning outcome:
How a mechanical/mechatronics engineer can contribute to objective clinical evaluation.

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