

OPEN PHD POSITION AT THE UNIVERSITY OF MARYLAND

The Laboratory for Control and Information Systems in the Department of Mechanical Engineering at the University of Maryland is looking for an exceptional MS/PhD student equipped with a strong background in dynamical systems and controls with biomedical engineering focus. The list of desired qualifications are: 1) solid knowledge and experience on dynamical systems, system identification and control systems with application to real-world problems, 2) fluency in using MATLAB/SIMULINK, 3) experience with mechatronic implementation of data acquisition and control systems (e.g. Biopac, LabView), and 4) knowledge of quantitative cardiovascular and respiratory systems physiology (not required but preferred).

The student is expected to perform research on mathematical modeling, system identification, and closed-loop control of medication infusion. The earliest start date is Jan 2017, but is negotiable.

If you are interested, please contact Dr. Jin-Oh Hahn at jhahn12@umd.edu with the following in a single PDF file:

- 1) Up-to-date CV with publication list
- 2) BS and MS transcript (unofficial copy)
- 3) List of > 2 references with contact information
- 4) Proposed start date

The vision of the Laboratory for Control and Information Systems is to advance health monitoring and maintenance methodologies that are applicable to a wide range of dynamic systems by exploiting control and systems theory, with special emphasis on bio-systems and healthcare. To this aim, our research activity covers a number of aspects on non-intrusive and ubiquitous sensing, modeling via system identification and signal processing, condition monitoring and fault diagnostics via on-line estimation and analytical redundancy techniques, and maintenance/intervention via decision making and closed-loop control. Our current focus areas are 1) physiologic systems monitoring, 2) adaptation, monitoring and control challenges in pharmacological systems with applications, 3) modeling, system identification and closed-loop control in patient support systems, and 4) fault diagnostics and accommodation in mechanical systems and structures.