

THE DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, CS DIVISION

## **Presents the 2012 EECS Spring Seminar Series**

# **Michael Gubanov**

**Stanford University** 

#### "Towards Gaining Control Over Information Overflow" Friday, March 23, 2012 1:30 p.m. HEC 356

#### **ABSTRACT**

Continuous technological advances cause exponential growth of digitized information in all major areas of our life. Web, Electronic Health Records (EHR), Web Biomedical databases, publications, patient sensors, and other sources of valuable information produce more data every year and urgently need new technologies to gain control over information overflow.

By nature the produced data are heterogeneous and large-scale, therefore interdisciplinary approaches involving Information Retrieval (IR), Machine Learning, Natural Language Processing (NLP), and Biomedical Informatics become necessary.

In this talk, I will provide an overview of the field and focus on some of our recent results, including selflearning distributed data management paradigm, designed in collaboration with IBM Research; a new cyberphysical system that helps improve patient safety; and a new structural Information Retrieval (IR) engine for unstructured text. As time permits, I will also briefly mention some future research directions.

#### **BIOGRAPHY**

After earning his Ph.D. in Computer Science& Engineering in the Paul G. Allen Center at the University of Washington (UW), Dr. Gubanov has been participating in the interdisciplinary Biomedical research initiative spanning several departments at Stanford University.

While at the University of Washington he was a research intern at IBM Almaden Research Center and Google. His research was invited to publication as a chapter in the book on major advances in Information Reuse and Integration published by Springer in 2012, and highlighted in the book on Data management published by Springer in 2011. Finally, he was twice a recipient of George Soros national award for research excellence, and a full Clarendon Fund Fellowship for three years.

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