## **Special Lecture**

Data Science in the Children's Hospital Los Angeles Pediatric ICU



## October 24<sup>th</sup> (Tue) 2017 18:00-18:45

Academic Hall @ Molecular & Life Innovation Building

David Ledbetter discusses projects using state-of-the-art deep learning algorithms with data collected over 15 years from the Children's Hospital Los Angeles Pediatric ICU. Topics will include an introduction to Recurrent Neural Networks (RNNs), mortality prediction, and implications of data quality.



## David Ledbetter, B.Sc.

Mr. David Ledbetter has an extensive and deep understanding of decision theory. He has experience implementing various decision engines, including convolutional neural networks, random forests, extra trees, and linear discrimination analysis. His particular area of focus is in performance estimation, where he has demonstrated a tremendous ability to accurately predict performance on new data in nonstationary, real-world scenarios.

David has worked on a number of real-world detection projects, including detecting circulating tumor cells in blood, automatic target recognition utilizing CNNs from satellite imagery, make/model car classification for the Los Angeles Police Department using CNNs, and acoustic right whale call detection from underwater sonobuoys. Recently, David has been developing an RNN to generate personalized treatment recommendations to optimize patient outcomes using electronic medical records from 15 years of data collected from the Children's Hospital Los Angeles Pediatric Intensive Care Unit.







[Organizer]
The University of TOKYO

Free admission

Center of Innovation (COI)

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