

CAPPLab Tech-Talk



DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE



WICHITA STATE
UNIVERSITY

COLLEGE OF ENGINEERING



APPLICATIONS OF KNApSack DATABASE and DPCLUS ALGORITHM:

*Plants to Metabolites to Target Proteins in the
Context of Jamu Medicines and IBD Gene Prediction*

SPEAKER:

Dr. Altaf-Ul-Amin

Nara Institute of Science and Technology (NAIST), Japan



The talk starts with the KNApSack database, the DPCLUS algorithm, and a new method to predict the relation between plant and disease using network analysis and supervised clustering based on Jamu (the common name of Indonesian traditional medicines) formulas. Next, the talk focuses on (i) the analysis for predicting Jamu efficacy based on metabolite composition by applying various machine learning techniques and (ii) the application of DPCLUS algorithm in finding inflammatory bowel disease related genes. The talk ends with a discussion on how various high-performance computing techniques can be applied in this research to make the data analysis faster and/or automated.



November 11, 2019
12:30 – 1:30 p.m.
Jabara Hall | Room 261

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