আগামী ২৭-০২-২০১৭ইং তারিখ সোমবার বিকাল ৩ঃ৩০মিনিটে আইআইসিটির সেমিনার রুমে (রুম নং- ৭০৬) Data-Intensive Science of Herbal Medicine এর উপর একটি সেমিনার অনুষ্ঠিত হবে। উক্ত সেমিনারে বক্তব্য রাখবেন Dr. Md. Altuf-Ul-Amin, Associate Professor, Nara Institute of Science and Technology (NAIST), Japan. আপনার বিভাগ/ইনস্টিটিউট/হল এর সম্মানিত শিক্ষক মহোদয় ও ছাত্র-ছাত্রীদের মাঝে প্রচারনার জন্য ২টি পোস্টার পাঠানো হল। এ বিষয়ে প্রয়োজনীয় ব্যবস্থা গ্রহনের জন্য অনুরোধ করছি।

> (ডঃ মোঃ সাইফুর্ল ইসলাম) অধ্যাপক ও পরিচালক আইআইসিটি, বুয়েট, ঢাকা।

VHead (gSE)

1. e-mail link to teachers (only the goster)

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Mr. Wannan (5)
Will Mannan (5)

Seminar on Data-Intensive Science of Herbal Medicine

Organized By: IICT, BUET

Data-Intensive Science of Jamu Medicines

Abstract: Popular traditional medicines from Indonesia are known as Jamu. A Jamu formula is composed of a single plant or a mixture of several plants, and the formulation of Jamu is generally developed based on the experience of users for decades or even hundreds of years. In this talk we will explore and explain interesting patterns in the formulation of Indonesian Jamu medicines by utilizing data -intensive science and machine learning methods. Initially, we will discuss a new method to predict the relation between plant and disease using network analysis and supervised clustering. Furthermore, we will focus on the capability of binary similarity and dissimilarity measures to classify the Jamu pairs into match and mismatch efficacies by using Receiver Operating Characteristic (ROC) analysis. The selection of binary similarity and dissimilarity measures for multivariate analysis of Jamu medicines is data dependent. Next, I will extend the talk on the analysis for predicting Jamu efficacy based on metabolite composition and identifying important metabolites. The Support Vector Machine (SVM) with linear kernel and Random Forest (RF) produced good classification models if we combine these classifiers with Single Filtering algorithm and Regularized RF. Also, I will briefly discuss on speciesmetabolite relational database KNApSAcK and graph clustering algorithms DPClus and DPClusO which we have developed in our Lab.

Md. Altaf-Ul-Amin Ph.D.



Associate Professor Nara Institute of Science and Technology (NAIST), Japan

Date: 27th February, 2017 (Monday)

Time: 3:30 PM

Venue:

IICT Seminar Room (Room 706), 7th Floor, ECE Building, BUET

Md. Altaf-Ul-Amin received B.Sc. degree in Electrical and Electronic Engineering from Bangladesh University of Engineering and Technology (BUET), Dhaka, M.Sc. degree in Electrical, Electronic and Systems Engineering from Universiti Kebangsaan Malaysia (UKM) and PhD degree from Nara Institute of Science and Technology (NAIST), Japan. He received the best student paper award in the IEEE 10th Asian Test Symposium. Also, he received two other best paper awards as a co-author of journal articles. He previously worked in several universities in Bangladesh, Malaysia and Japan. Currently he is working as an Associate Professor in Computational Systems Biology Lab of NAIST. He is conducting research on Network Biology, Systems Biology, Cheminformatics and Biological Databases. He published around 60 peer reviewed papers in international journals and conference