KU INFORMATION & TELECOMMUNICATION TECHNOLOGY CENTER
The University of Kansas

Office of Technology Commercialization

ITTC's mission is to advance knowledge and create innovative technologies in information systems, networking and communications, bioinformatics, and radar;

To education and train students for technology leadership;

To transfer knowledge and innovative technologies to Kansas companies and national industries;

By providing an excellent interdisciplinary research and development environment.

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ITTC is a KTEC Center of Excellence, funded in part by the Kansas Technology Enterprise Corporation.

Title of Invention: Shallow Feature Selection

Technology ID: ITTD050601, 2006FY38IT

Non-Confidential Description: This computational algorithm for feature selection and classification can be applied to microarray data to extract logical mechanism. It provides a probability of importance for each gene and can identify genes that are missed using current methods. This technology is a filter method which focuses on the difference between statistical distributions. No assumption of any prior distribution of data is made; the distribution is calculated based on the data. Similar to other filter methods, this method assumes that all features are independent. Method can be applied to areas where feature selection is needed, such as when it is necessary to pick a few pixels from images or video for classification.

Applications: Potential applications are gene discovery, cancer classification, cancer diagnosis, drug discovery, diagnostic tools, and any areas where feature selection is needed (for example, when it is necessary to pick a few pixels from images or video for classification).

Possible uses are (1) gene discovery and cancer classification; (2) cancer diagnosis. This invention can actually be applied to many different areas where feature selection is needed, for example, to detect human face for suvillance purposes, it is necessary to pick few pixels from images or video for classification.

Patent Status: Issued

Confidential Disclosure Agreement: KU is willing to enter into a Confidential Disclosure Agreement for the purpose of negotiating a License Agreement. If you are interested in learning details of this invention, please contact:

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Updated: April, 2009