

# REGNET: Regulatory Information Management, Compliance and Analysis

Kincho H. Law and Gloria Lau  
Engineering Informatics Group  
Department of Civil and Environmental Engineering  
Stanford University  
Stanford, CA, 95014, USA  
Email: law@stanford.edu; glau@stanford.edu

**Abstract**— While regulations provide many social benefits, such as protecting our environment and improving public safety, the complexity and volume of government regulations and related information are detrimental to business and hinder public understanding. The burden of complying with regulations can fall disproportionately on small businesses. Governmental portals have emerged to facilitate public access to government information and services but most of them are designed primarily for displaying the regulatory information and often usable only by experienced users, who are familiar with the subject and the portal. It remains difficult to locate cross-referenced information and to link regulatory information with useful applications. The REGNET project has dealt with four aspects in the utilization of IT related to regulatory information: (1) development of a regulation-centric compliance assistance framework [1]; (2) development of a relatedness analysis framework for comparing regulatory documents and supporting e-rulemaking analysis [2]; (3) utilizing text-mining techniques to gauge involvement of public agencies in environmental management [3]; and (4) developing an ontology-based framework for retrieval of patents and related legal and regulatory information [4].

## REFERENCES

- [1] S. Kerrigan, A Software Infrastructure for Regulatory Information Management and Compliance Assistance, Ph.D. Thesis, Stanford University, 2003.
- [2] G. T. Lau, A Comparative Analysis Framework for Semi-Structured Documents, with Applications to Government Regulations, Ph.D. Thesis, Stanford University, 2004.
- [3] J. Ekstrom, G. Lau, C.P. Cheng, D. Spiteri, and K. Law, "Gauging agency involvement in environmental management using text analysis of laws and regulations," *I/S – A Journal of Law and Policy for the Information Society*, 6(2):189-219, 2010.
- [4] S. Taduri, H. Yu, J.P. Kesan, G.T. Lau, and K.H. Law, "Developing a comprehensive patent related information retrieval tool," *Journal of Theoretical and Applied Electronic Commerce Research*, (in press).