VirginiaTech
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Computer Science Seminar Series, 2016
National Capital Region

Big Data Analytics in Healthcare Fraud Prevention

Speaker: Dr. Michael Y. Huang
Northrop Grumman
Friday, November 11, 2016
1:00PM- 2:00PM, NVC T3

Abstract

Healthcare data volume is expected to grow dramatically in the years ahead. Over time, health-related data will be created and accumulated continuously, resulting in an incredible *volume* of data. Further, data is accumulated in near real-time and at a rapid pace, or *velocity*; and from various sources in an unstructured format, or *variety*. To prevent healthcare fraud, we need to analyze the big data to find out fraud patterns. Big data analytic tools, such as Hadoop, have been recently developed to handle the volume, velocity and variety issues of big data. In this seminar, we review the capability of various recently developed big data analytic tools, and apply them to design a healthcare fraud prevention system that drastically improve performance and reduce costs in healthcare fraud prevention.

Biography

Dr. Huang is a system architect at Northrop Grumman Health IT. Michael Huang received his B.S. degree in Transportation Engineering from Tongji University, Shanghai, China, in 1982; his MS degree in Systems Engineering from Beijing Jiaotong University, Beijing, China, in 1985; and his Ph.D. degree in Civil Engineering from the University of California at Berkeley in 1995. He has held various technical positions with Network Solutions, VeriSign, IBM, and Northrop Grumman. Dr. Huang's current interests include cloud computing, big data analytics, analytical and predictive modeling, and fraud prevention in healthcare.