

CCSU  
DEPARTMENT OF MATHEMATICAL SCIENCES

# COLLOQUIUM

Friday, April 25  
1:15 – 1:45 PM  
Davidson Hall, Room 207

## IMPLEMENTATION OF THE CUSTOMER LIFETIME VALUE MODEL IN THE CONTEXT OF FINANCIAL SERVICES

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(Data Mining MS Thesis Presentation)

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**Abstract:** The challenge of justifying long-term investments using traditional business case evaluation methodologies became increasingly transparent due to increased awareness, shareholder activism, traditional and social media. However, an in depth analysis of the current customer base and its potential to generate revenue in the future using quantitative methods is out of reach for many smaller organizations. The primary objective of this thesis is to develop a practical step by step methodology for implementation of a predictive Customer Lifetime Value model of the existing customer base. The intent of this work is to enable organizations to use Customer Lifetime Value as one more performance indicator. Development and evaluation of the CLV model is done using a sample of the data from a regional credit union. The model itself is built using a mix of data mining techniques such as Markov chains and CART decision trees. The entire data mining cycle is described in great detail and final results show that a CLV model built using Markov chains and decision trees is a viable method for predicting future cash flow of existing customers in the context of retail banking business.

***For further information:***

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