

Xuan Tan

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EDUCATION

Florida International University (Miami, FL, USA)	2015-2020
. PhD in Business Administration Information Systems and Business Analytics	
The University of Manchester (Manchester, UK)	2013-2014
. MSc in Business Analytics: Operational Research and Risk Analysis	
Central South University (Changsha, Hunan, PR China)	2009-2013
. BSc in Accounting	

WORK EXPERIENCE

Santa Clara University (Santa Clara, CA, USA)	Assistant Teaching Professor	2020-present
. Courses taught – undergraduate-level:		
OMIS 34: Science, Information Technology, Business and Society		
OMIS 40: Statistics and Data Analysis I		
OMIS 41: Statistics and Data Analysis II		
OMIS 108: Operations Management		
. Courses taught – graduate -level:		
ISBA 2404: Dashboards with Tableau		
ISBA 2412: Data Visualization		
Florida International University (Miami, FL, USA)	Research Assistant/Instructor	2015-2020
Founder Securities (Changsha, Hunan, PR China)	Intern	2012
Robert BOSCH GmbH (Changsha, Hunan, PR China)	Intern	2010

PUBLICATIONS

- . Min Chen, **Xuan Tan**, Rema Padman. “A machine learning approach to support urgent stroke triage using administrative data and social determinants of health at hospital presentation: retrospective study” *Journal of Medical Internet Research* 25, e36477
- . Sung J Choi, Min Chen, **Xuan Tan**. “Assessing the impact of health information exchange on hospital data breach risk” *International Journal of Medical Informatics* 177, 105149
- . Min Chen, **Xuan Tan**, Rema Padman. “Social Determinants of Health in Electronic Health Records and Their Impact on Analysis and Risk Prediction: A Systematic Review” *Journal of the American Medical Informatics Association* 27 (11), 1764-1773
- . Min Chen, Sheng Guo, **Xuan Tan**. "Does Health Information Exchange Improve Patient Outcomes? Empirical Evidence from Florida Hospitals." *Health Affairs* 38 (2), 197-204

PROJECTS

- Social Determinants of Health (SDoH)** – SDoH Effect on Health Outcome
 - . Predicted 30-day readmission rate using Electronic Health Records (EHR) claims data and area-level SDoH information; Created an early stroke detection model using machine learning methods.
- Effect of Delivery System Reform Incentive Payment (DSRIP) program in Texas**
 - . Analyzed and predicted 30-day readmission rate, along with other health outcome variables using EHR claims data from Texas Hospital Association Data using Microsoft SQL server and R.
- Applied Statistics and Business Forecasting** - Risk Characteristics Analysis of Stocks
 - . Analyzed risk and volatilities of stocks and provided recommendations on stock selection.
- Data Analytics for Business Decision making** - Dunnhumby Sales Prediction
 - . Built and compared predictive models for Dunnhumby to forecast sales of new product using SAS Enterprise Miner, and R. Applied principle component analysis, general linear regression, mixed model, decision tree, artificial neural network and autoregressive integrated moving average. Incorporated linear mixed model with least absolute shrinkage and selection operator (LASSO) to identify the “best” subset of predictors.
- Risk, Performance and Decision Analysis** - Performance and Efficiency Analysis for Suppliers of a Fashion Retailer
 - . Provided analysis on past performance and efficiency of twelve suppliers for an Asian fashion retailer as well as suggestions on future improvements for suppliers by applying Multiple Criteria Decision Analysis (MCDA), Data Envelopment Analysis (DEA) and Multiple Objective Linear Programming (MOLP).

Multiple Criteria Decision Making for Supplier Selection

. Applied multiple criteria decision making (MCDM) for supplier selection, using fuzzy preference programming (FPP) and group fuzzy preference programming (GFPP) for the computational simplicity and elimination of asymmetry problems of the reciprocal fuzzy numbers. Applied analytical hierarchy process combined with fuzzy set theory.

COMPUTER SKILLS

- . Proficient in: R, Python, SAS, STATA, and SQL;
- . Proficient in: Tableau, Power BI.