

## Machine Learning and Model Explanation in Mass Appraisal

This presentation will overview key applied machine learning (ML) techniques in mass appraisal. Specific parametric and non-parametric comparable sales approaches and model explanation techniques will be surveyed.



Joe Wehrli  
Enterprise Architecture Manager  
Tyler Technologies

Joseph Wehrli, Enterprise Architecture Manager, Tyler Technologies Inc., USA

Joseph Wehrli (Joe) is an enterprise architect and computer scientist at Tyler Technologies, where he performs advanced research and development in property valuation and tax administration. As both a software firm executive and an independent consultant, Joe has been involved in a wide range of appraisal technology projects, including collaborations with New York City, Washington, DC, Sedgwick County, KS, the City of Boston, as well as international clients such as the British Columbia Assessment Authority, the City of Calgary, and the State of Michoacán, Mexico. In his consulting career, Joe has applied machine learning, simulation, optimization, real-time systems, and rule-based systems to help Fortune 500 companies and public sector agencies automate complex decision processes.

Joe holds a BA from Boston University and an MS in Computer Science from Georgia Tech. As part of his postgraduate work, he served as a visiting researcher at Delft University of Technology in the Netherlands and as a guest scientist at Siemens Corporate Research and Development in Germany.