Research Interests

My research interests include data analysis, optimization techniques under single and multiple objective functions, and the interface between optimization and statistics (curve fitting, model estimation). Recent research has concentrated on investigation of the data sensitivity of the single equation multiple linear regression model under the minimization of absolute errors (MSAE) and related absolute functionals. The research centers on quantifying variations in the sample data that leave the fitted MSAE model unchanged. Results always incorporate applications drawn from real estate (market evaluation of unsold residential properties), robot selection, and other real data series drawn from northeast Indiana and beyond.

Students are drawn into data analysis through projects with regional companies such as Steel Dynamics, BeniComp, Fort Wayne Allen County Assessor’s Office, and others. The students work in groups with a project related to forecasting and other data analytic scenarios in MBA course Management Science and Data Analysis (M540) each semester. In this way the research relates to learning we seek for our degree programs at IPFW.

Pride is taken in working with students and colleagues within and outside the Doermer School of Business and Management Sciences, in relevancy of the research, and its success.