

MAN VAN MINH NGUYEN

Research Activities

Areas of Expertise

Mathematical Statistics and Applied Probability

Current Interests and Activities:

My current research activities involve statistical inference, discrete optimization and probabilistic modeling, applied in the following areas.

- 1) Data Analytics: utilizing statistical models, methods and algorithms, both parametric and non-parametric ones, to model and analyze multivariate data, and then to make statistically optimal decisions.
- 2) Statistical Quality Control and Management: developing, computing and analyzing of experimental designs, especially balanced fractional factorial designs (mixed orthogonal arrays). The methods include computational algebraic geometry and group theory; and the constructed designs will provide good prototypes in the off-line phase of industrial manufacturing.
- 3) Stochastic Analysis: combining methods of probability theory and statistical inference to study spatial-temporal stochastic processes, in particular cokriging models in environmental pollution study, and risk models in traffic engineering.