



## Dale Nesbitt

Affiliate, Management Science and Engineering

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#### BIO

Dr. Nesbitt has been teaching MSE 252 (Decision Analysis), MSE 352 (Professional Decision Analysis), MSE 353 (Advanced Decision Analysis), MSE 299 (Coercion Free Social Systems), and MSE 254 (The Ethical Analyst) in the department. He has practiced and taught in these fields, and economic modeling, for several decades.

Dr. Nesbitt has been researching Bayesian statistical analysis, ethics, and ethical theories in a general setting (i.e., personal ethics not necessarily associated with any particular field or discipline). His research focuses on ethics per se, not ethics related to a specific technology, commodity, discipline, area, or practice. He is currently focused on ethics from a socio-personal perspective, one in which coercion is minimized or sanctioned, one that blends the utilitarian approach of Harsanyi, Mill, Bentham, and others with the uncoerced game theory approach of Nash and Harsanyi. The objective of this research is to give a roadmap for people (and groups) to behave ethically and do good and also to be able to consider ethical decision making under uncertainty.

Dr. Nesbitt is completing a monograph on Bayesian Linear Regression intended to unify key dimensions of the field around a pure Bayesian probabilistic viewpoint, what he calls “unabashed Bayes.” The monograph is scheduled for completion in 2022. Dr. Nesbitt continues to research and practice Bayesian regression and probabilistic analysis, recently applying it to disciplines such as automobile selection, jet technology and fuel projection, and petrochemicals demand.

Dr. Nesbitt has focused for many years on building economic-environmental models of the key energy commodities—oil and refined products, natural gas, petrochemicals, automobiles, electric power generation, natural gas and electricity storage, renewable energy, environmental emissions and remediation, and demand/emission. His models and work in the field are well known, extending the classical economic equilibrium approach.

Dr. Nesbitt has worked and published in the field of semi-Markovian Decision Problems (the area of his thesis at Stanford), energy economics, cartels and monopolies, methods for modeling markets, Bayesian statistics, and free (meaning uncoerced) social systems.