

# Prof. Dr. Sutarman, M.Sc

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*Prof. Dr. Sutarman, M.Sc., was born in Belawan, Medan, on October 26, 1963, and is a lecturer in Mathematics at Universitas Sumatera Utara. He completed a Doctoral Program in Mathematics in Malaysia in 2003.*

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## Publications

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2025

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### **Hybrid Genetic Algorithm for Dynamic Portfolio Optimization Problems**

SUTARMAN , ELVINA HERAWATI

2025

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### **Optimization model of vehicle routing problem with heterogenous time windows**

MUHAMMAD ROMI SYAHPUTRA , HERMAN MAWENGGANG , SUTARMAN , Gerhard Wilhelm Weber

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### **Water distribution network optimization**

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### **Computational analysis of stability of wave propagation against submerged permeable breakwater using hybrid finite element method**

MUHAMMAD ROMI SYAHPUTRA , TULUS , SUTARMAN , TULUS JOSEPH HERIANTO

2018

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### **Analysis backpropagation methods with neural network for prediction of children's ability in psychomotoric**

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### **Hybrid cryptosystem RSA - CRT optimization and VMPC**

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### **Optimization modeling for sustainable production and scheduling of crude palm oil milling industries**

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### **On solving robust optimization using decomposition approach**

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## **Forecasting Plant Growth Using Neural Network Time Series**

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## **Improving the accuracy of k-nearest neighbor (k-NN) using Synthetic Minority Oversampling Technique (SMOTE) and Gain Ratio (GR) for imbalanced class data**

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## **Dataset Weighting Features Using Gain Ratio To Improve Method Accuracy Naive Bayesian Classification**

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## **Adaptive k-Nearest Neighbor Learning for Robust Modal Regression on Multimodal and Heavy-Tailed Data**

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## **Modeling a variant of periodic heterogeneous vehicle routing problem with driver scheduling**

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## **Water Distribution Network Optimization Model with Reliability Considerations in Water Flow (Debit)**

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## **Optimization of the Crude Palm Oil Supply Chain Using a Mixed Integer Linear Programming Model**

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## **Sustainable local seafood production planning with uncertainty in demand**

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## **Association Rules Analysis Using Algorithm Apriori And Fuzzy Normalization**

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## **Poverty Modeling in North Sumatera Province Considering County Location Using Geographical Weighted Regression and LASSO**

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## **Pelatihan Pemanfaatan TIK sebagai Media Pembelajaran di SMK Dharma Bhakti dengan Pendekatan Manajerial**

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## **Data envelopment analysis to determine the size of productive scale with real and integer value data**

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### **Exploratory Data Analysis (EDA) methods for healthcare classification**

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### **A Review: Development of MQL systems applied for metal cutting**

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### **Analysis of the Application of Fuzzy Logic and Levenberg-Marquardt in the Calculation of Used Car Prices**

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## **Application of Fuzzy Time Series Method Cheng Model in Forecasting Stock Prices PT Bukit Asam Tbk**

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## **Genetic Algorithm in Image Inserting with Modified Least Significant Bit Method to Find the Best MSE Value**

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## **Development of Mamdani Fuzzy Rule-Based System Using the Gray Wolf Optimizer (GWO) Algorithm for Maritime Safety Prediction**

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## **Dynamic Analysis of Rumor Spreading Models in Social Networks with Time Delay**

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## **Estimating parameter of Rayleigh distribution by using Maximum Likelihood method and Bayes method**

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## **Pengembangan Web Company Profile Sebagai Upaya Pengabdian Kepada Masyarakat Di PT. Hamim Technology Indonesia**

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## **Feature Selection Using Ensemble Lasso Regression, Random Forest and Recursive Feature Elimination Methods in Breast Cancer Classification**

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## **Retinal thickness changes after phacoemulsification**

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## **RESILIENCE MODEL DEVELOPMENT FOR MULTI-DEPOT VEHICLE ROUTING PROBLEMS WITH PROBABILITY CONSTRAINTS UNDER DISTURBANCE CONDITIONS**

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## **PERFORMANCE OF ROBUST SUPPORT VECTOR MACHINE CLASSIFICATION MODEL ON BALANCED, IMBALANCED AND OUTLIERS DATASETS**

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## Accuracy in Forming Clusters

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## **INTEGRASI RULE-BASED AI DAN AUGMENTED REALITY PADA SMART ADAPTIVE LEARNING UNTUK AKSELERASI COMPUTATIONAL THINKING SISWA ASD**

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