Maya Silvi Lydia

Lecturer of Doctoral Program in Computer Science Study Program
Faculty of Computer Science and Information Technology
Universitas Sumatera Utara

maya.silvi@usu.ac.id

Jl. Universitas No. 9A Kampus USU, Medan 20155

+62 812-6091-706

fasilkom-ti.usu.ac.id/en/lecturer/maya-silvi-lydia

Dr. Maya Silvi Lydia was inaugurated as Dean of Fasilkom-TI for the 2021–2026 period. In the same year, she was awarded as one of the best online education lecturers at USU. Dr. Maya Silvi Lydia — who was born on January 27, 1974 in Medan— received her bachelor's and master's degrees from Universiti Putra Malaysia (UPM) and her doctoral degree from Universitas Sumatera Utara. Dr. Maya is very active in practicing the Tri Dharma of Higher Education. She teaches various subjects and has graduated more than 80 people from Universitas Sumatera Utara. In terms of research, Dr. Maya has experience as a presenter at national and international scientific seminars. In addition, Dr. Maya has carried out many community service activities. She chooses to be herself and puts forward an attitude that can create change in a positive direction.

Publications

2026
Jurnal internasional bereputasi

DEVELOPMENT OF A TRIE-BERT PIPELINE FOR AUTOMATIC SPACING AND LOW RESOURCE LANGUAGE CLASSIFICATION IN BATAK TOBA AND ANGKOLA SCRIPTIO CONTINUA TEXTS

MUHAMMAD ANGGIA MUCHTAR , OPIM SALIM SITOMPUL , MAYA SILVI LYDIA , SYAHRIL EFENDI

2026
Makalah ilmiah

A Comprehensive Taxonomy and Dynamic Optimization Framework for Fuzzy C-Means Clustering

MAHYUDDIN , ADE CANDRA , MAYA SILVI LYDIA

2026
Prosiding seminar internasional

Combination Spatial Autoregressive with Extreme Gradient Boost in Rice Price Prediction

ERNA BUDHIARTI NABABAN , MAYA SILVI LYDIA

2026
Prosiding seminar internasional

Classification of Aedes Mosquito Larvae Using Hybrid Convolutional Neural Network and Long Short-Term Memory

HAYATUNNUFUS , SYAHRIL EFENDI , MAYA SILVI LYDIA , MOHAMMAD ANDRI BUDIMAN , DHANI SYAHPUTRA BUKIT , ARYA DWIHARSYA , Riza Sulaiman , Ledy Afrida Sinaga , PAUZI IBRAHIM NAINGGOLAN

2025
Prosiding seminar internasional

An Analytical Study of Easy Simple Factoring RSA (ESF-RSA) and Phony RSA Cryptosystem

DIAN RACHMAWATI , MAYA SILVI LYDIA , MOHAMMAD ANDRI BUDIMAN , ROMI FADILLAH RAHMAT

2025
Prosiding seminar internasional

Comparative Study of Public Key Cryptosystem: Somsuk RSA vs Modified RSA

DIAN RACHMAWATI , MAYA SILVI LYDIA , MOHAMMAD ANDRI BUDIMAN , ROMI FADILLAH RAHMAT

2025
Prosiding seminar internasional

Multi-Class Spam Classification in Bahasa Indonesia Messaging Platforms Using IndoBERT

AMALIA , MAYA SILVI LYDIA , PAUZI IBRAHIM NAINGGOLAN , ROMI FADILLAH RAHMAT , Rabiah Abdul Kadir , Prof. Dr. Rahmita Wirza O.K. Rahmat

2025
Jurnal internasional bereputasi

Optimizing Celiac Disease Detection Through Dataset Balancing and Deep Learning in a Mobile Application

AMALIA , MAYA SILVI LYDIA , SRI MELVANI HARDI , ANDREW BENEDICTUS JAMESIE , Hasanul Fahmi

2025
Jurnal internasional

Mid-Upper Arm Circumference Measurement Using Digital Images: A Top-Down Approach with Panoptic Segmentation Using Mask R-CNN

MAYA SILVI LYDIA , PAUZI IBRAHIM NAINGGOLAN , DESILIA SELVIDA , DHANI SYAHPUTRA BUKIT , AMALIA , DOLI AULIA HAMDALAH , Prof. Dr. Rahmita Wirza O.K. Rahmat

2025
Prosiding seminar internasional

Leveraging Machine Learning Techniques for Stunting Detection and Height Growth Prediction in Children Aged 0-5 Years

PAUZI IBRAHIM NAINGGOLAN , DHANI SYAHPUTRA BUKIT , MAYA SILVI LYDIA , HUSEIN IBNU MAHMUD , RIZKY MAULANA SEMBIRING , RARA MAURA HASIBUAN , DAVINA ATHIRAH , FAHIA MEUTIA MUFIDA , Prof. Dr. Rahmita Wirza O.K. Rahmat

2025
Prosiding seminar internasional

BERT For Classifying Intent in Ulos Fabric and Batak Culture Learning Chatbot

SYARIFAH ATIKA , MAYA SILVI LYDIA , MUHAMMAD ANGGIA MUCHTAR

2024
Prosiding seminar internasional

Classification of Single Tuition Fee with Imbalanced Data Using XGBoost and SMOTE

MAYA SILVI LYDIA , AMALIA , ROMI FADILLAH RAHMAT , MUHAMMAD ISA DADI HASIBUAN

2024
Prosiding seminar internasional

Improving SVM Performance in Determining Cost and Kernel Parameter Values Through Grid Search

MAYA SILVI LYDIA , BENNY BENYAMIN NASUTION

2024
Prosiding seminar internasional

Customer Segmentation Based on Recency, Frequency, Monetary, Variety and Duration (RFMVD)

MAYA SILVI LYDIA , MUHAMMAD ANGGIA MUCHTAR , AGUS SUNDARI

2024
Prosiding seminar internasional

Automated Indonesian Essay Scoring and Holistic Feedback Using Bidirectional Encoder Representations for Transformers

AMALIA , MAYA SILVI LYDIA , DEWI SARTIKA BR GINTING , DANI GUNAWAN , FARADHILA AULIA UTAMI TANJUNG

2024
Prosiding seminar internasional

Indonesian Dynamic Sign Language Recognition for Individuals with Sensory Disabilities using LSTM

MAYA SILVI LYDIA , ERNA BUDHIARTI NABABAN , RENI YUNITA

2024
Prosiding seminar internasional

Improved Accuracy of Decision Tree with XGBoost Technique in Cat Skin

Disease Diagnosis

MAYA SILVI LYDIA , BENNY BENYAMIN NASUTION , NANDA SAFRINA

2024
Prosiding seminar internasional

Sentiment Analysis of Multi-Social Media Platform About Medical Services Using Support Machine Vector

AMALIA , MAYA SILVI LYDIA , AMER SHARIF , Cindy Nainggolan

2024
Prosiding seminar internasional

Sentiment analysis of multi-social media platform about medical services using support machine vector

AMALIA , AMER SHARIF , MAYA SILVI LYDIA

2024
Prosiding seminar internasional

Image Classification Of Diseases In Rice Using Deep Neural Neural Network And Incevtion V3

MAYA SILVI LYDIA , SYAHRIL EFENDI , T.HENNY FEBRIANA HARUMY

2024
Prosiding seminar internasional

Implementation of Celiac Disease Detection Using a Website-based Artificial Neural Network Approach

AMALIA , SRI MELVANI HARDI , MAYA SILVI LYDIA

2024
Prosiding seminar internasional

Classification Of Aedes Mosquito Larva Using Convolutional Neural Networks And Extreme Learning Machine

EDI SUBROTO , MAYA SILVI LYDIA , Ledy Afrida Sinaga , MOHAMMAD ANDRI BUDIMAN , SYAHRIL EFENDI , PAUZI IBRAHIM NAINGGOLAN , DHANI SYAHPUTRA BUKIT , ROMI FADILLAH RAHMAT

2023
Prosiding seminar internasional

Implementation of Celiac Disease Detection Using a Website-based Artificial Neural Network Approach

AMALIA , MAYA SILVI LYDIA , SRI MELVANI HARDI , ANDREW BENEDICTUS JAMESIE

2023
Prosiding seminar internasional

Text-based File Security with Signcryption Using AAβ and DSA Algorithms

LATHIFAH TSAMRATUL'AIN , MOHAMMAD ANDRI BUDIMAN , MAYA SILVI LYDIA

2023
Jurnal internasional bereputasi

A NOVEL APPROACH TO THE DEVELOPMENT OF NEURAL NETWORK ARCHITECTURE BASED ON METAHEURISTIC PROTIS APPROACH

MAYA SILVI LYDIA , SYAHRIL EFENDI , T.HENNY FEBRIANA HARUMY , MUHAMMAD ZARLIS

2023
Jurnal nasional terakreditasi

Reduksi Atribut Menggunakan Chi Square untuk Optimasi Kinerja Metode Decision Tree C4.5

ELVIAWATY MUISA ZAMZAMI , MAYA SILVI LYDIA , ANIRMA KANDIDA BR GINTING

2023
Prosiding seminar internasional

OLCBot: Dissemination Of Interactive Information Related To Indonesiaâ€™s Omnibus Law With The Implementation of Fuzzy String Matching Algorithm and Sastrawi Stemmer

SRI MELVANI HARDI , MAYA SILVI LYDIA , AMALIA , ELVIAWATY MUISA ZAMZAMI

2023
Artikel ilmiah

Optimization of Support Vector Machine Algorithm using Stunting Data Classification

MAYA SILVI LYDIA , SYAHRIL EFENDI

2022
Book chapter internasional

Natural Language Processing In Healthcare

MAYA SILVI LYDIA

2022
Prosiding seminar internasional

Category Based Sentiment Analysis for Basic Skin-Cares Using LDA and SVM Approach

MAYA SILVI LYDIA , AMALIA , TASNIM LUBIS

2021
Book chapter internasional

Analysis of Medical Modalities for Improved Diagnosis in Modern Healthcare

MAYA SILVI LYDIA

2021
Jurnal nasional terakreditasi

Peningkatan Akurasi Metode K-Nearest Neighbor dengan Seleksi Fitur Symmetrical Uncertainty

ELVIAWATY MUISA ZAMZAMI , MAYA SILVI LYDIA , ANIRMA KANDIDA BR GINTING

2021
Prosiding seminar internasional

Prediction Using A Neural Network Algorithm Approach (A Review)

MAYA SILVI LYDIA , MUHAMMAD ZARLIS , SYAHRIL EFENDI , T.HENNY FEBRIANA HARUMY

2021
Prosiding seminar internasional

Robot Arm Inverse Kinematics Wrist Tilt Repair Using PID Control System (Proportional, Integrative, Derivative)

RAHMAT WIDIA SEMBIRING , MAYA SILVI LYDIA

2021
Prosiding seminar internasional

Application of Decision Tree of Classification EPL

RAHMAT WIDIA SEMBIRING , MAYA SILVI LYDIA , SYAIFUL BAHRI

2021
Jurnal internasional

Analysis of RC6-Lite Implementation for Data Encryption

RAHMAT WIDIA SEMBIRING , MAYA SILVI LYDIA , AMIN SUBANDI

2021
Book chapter internasional

Analysis of Medical Modalities for Improved Diagnosis in Modern Healthcare

MAYA SILVI LYDIA

2021
Jurnal internasional bereputasi

Factorization of small rprime rsa modulus using fermat's difference of squares and kraitchik's algorithms in python

DIAN RACHMAWATI , MOHAMMAD ANDRI BUDIMAN , MAYA SILVI LYDIA

2020
Prosiding seminar internasional

Taxonomy Genetic Algorithm for Implementation Partially Mapped Crossover in Travelling Salesman Problem

MAYA SILVI LYDIA , SYAHRIL EFENDI , MUHAMMAD ZARLIS , SRI MELVANI HARDI

2020
Prosiding seminar internasional

HealFavor: Dataset and A Prototype System for Healthcare ChatBot

MAYA SILVI LYDIA

2020
Prosiding seminar internasional

Accuracy Analysis on Images Retrieval System using Radial Basis Function Algorithm and Coefficient Correlation

MAYA SILVI LYDIA , SAIB SUWILO

2020
Prosiding seminar internasional

The Identification of Negative Content in Websites by Using Machine Learning Approaches

AMALIA , MAYA SILVI LYDIA , DANI GUNAWAN

2020
Prosiding seminar internasional

Preliminary Study for identifying Rice Plant Disease Based on Thermal Images

IVAN JAYA , DIANA SOFIA HANAFIAH , MAYA SILVI LYDIA , INDRA AULIA

2019
Jurnal internasional bereputasi

Bahasa Indonesia text corpus generation using web corpora approaches

MAYA SILVI LYDIA , AMALIA , OPIM SALIM SITOMPUL , ERNA BUDHIARTI NABABAN

2019
Jurnal internasional bereputasi

Bahasa Indonesia text corpus generation using web corpora approaches

AMALIA , MAYA SILVI LYDIA

2019
Prosiding seminar internasional

Automatic Risk Detection System for Farmerâ€™s Health Monitoring Based on Behavior of Pesticide Use

AINUL HIZRIADI , MAYA SILVI LYDIA , EKA LESTARI MAHYUNI , INDRA AULIA

2019
Prosiding seminar internasional

Comparative Analysis Run-Length Encoding Algorithm and Fibonacci Code Algorithm on Image Compression

JOS TIMANTA TARIGAN , SRI MELVANI HARDI , MAYA SILVI LYDIA , IVAN JAYA

2019
Prosiding seminar internasional

Scientific Documents Classification Using Support Vector Machine Algorithm

JOS TIMANTA TARIGAN , SRI MELVANI HARDI , IVAN JAYA , MAYA SILVI LYDIA , INDRA AULIA

2018
Prosiding seminar internasional

Hybrid Cryptosystem Implementation Using IDEA and Knapsack Algorithm for Message Security

DIAN RACHMAWATI , MAYA SILVI LYDIA

2018
Jurnal nasional terakreditasi

Perbandingan Metode Klaster dan Preprocessing untuk Dokumen Berbahasa Indonesia

MAYA SILVI LYDIA , SITI DARA FADILLA , AMALIA

2018
Prosiding seminar internasional

Document Clustering Optimization with Synonym Dictionary Check Function

SITI DARA FADILLA , DANI GUNAWAN , AMALIA , MAYA SILVI LYDIA

Researches

2024
Penelitian Kerjasama Antar Perguruan Tinggi

Automated Essay Scoring Untuk Bahasa Indonesia Dan Melayu Dengan Umpan Balik Holistik Berbasis Deep Learning

AMALIA , MAYA SILVI LYDIA

2024
Ipteks

Deteksi Status Gizi Bayi berdasarkan Perhitungan Lingkar Kepala menggunakan Pendekatan Deep Learning

PAUZI IBRAHIM NAINGGOLAN , MAYA SILVI LYDIA , DHANI SYAHPUTRA BUKIT , Prof. Dr. Rahmita Wirza O.K. Rahmat

2023
Penelitian Fundamental

Model Identifikasi Risiko Malnutrisi dari Pengukuran Antropometri Citra Lingkar Lengan Atas (LILA)

LANOVA DWI ARDE M , DESILIA SELVIDA , ANANDHINI MEDIANTY NABABAN , ANNISA FADHILLAH PULUNGAN , PAUZI IBRAHIM NAINGGOLAN , MAYA SILVI LYDIA , DHANI SYAHPUTRA BUKIT

2023
Penelitian Dana Lokal Perguruan Tinggi

PENDEKATAN MULTIPLATFORM UNTUK DETEKSI PENYAKIT CELIAC DENGAN DEEP LEARNING DAN OVERSAMPLING SINTETIS

AMALIA , MAYA SILVI LYDIA , CHELIZA SRIAYU SIMARSOIT

2022
Penelitian Kerjasama Antar Perguruan Tinggi

CHATBOT BERBAHASA INDONESIA BERBASIS NLP DAN MACHINE LEARNING UNTUK MENDUKUNG DISEMINASI INFORMASI PENYAKIT TROPIS

TASNIM LUBIS , AMALIA , MAYA SILVI LYDIA

2021
Penelitian Dana Lokal Perguruan Tinggi

Stemming dan Lematisasi Bahasa Indonesia dengan Pendekatan Supervised dan Unsupervised Learning

AMALIA , DANI GUNAWAN , MAYA SILVI LYDIA , WIRA ARDI KESUMA ADJI , RIVALDO

2018
Penelitian Unggulan Perguruan Tinggi

Sistem Identifikasi Otomatis Dampak Penggunaan Pestisida terhadap Kesehatan Petani di Kabupaten Karo

EKA LESTARI MAHYUNI , INDRA AULIA , MAYA SILVI LYDIA , JOSEF KARANSA , RHAMA PERMADI AHMAD

2018
Penelitian Unggulan Perguruan Tinggi

Teknologi Pendeteksi Konten Negatif Pada Internet

AMALIA , DANI GUNAWAN , MAYA SILVI LYDIA , WESLEY

2017
Penelitian Dana Lokal Perguruan Tinggi

Klasterisasi Dokumen Berbahasa Indonesia dengan Metode TF-IDF dan Latent Semantic Analysis

AMALIA , SITI DARA FADILLA , MAYA SILVI LYDIA , MUHAMMAD MIFTAHUL HUDA

Community Services

2025
Ipteks Bagi Masyarakat

CYBER SECURITY AWARENESS: PEMBANGUNAN APLIKASI CHAT-BOT

BERBASIS ARTIFICIAL INTELLIGENCE SERTA DAMPAK DAN ANCAMAN PESAN SCAM UNTUK SISWA SEKOLAH INDONESIA BANGKOK

AMALIA , ROMI FADILLAH RAHMAT , PAUZI IBRAHIM NAINGGOLAN , MAYA SILVI LYDIA , IVANNY PUTRI MARIANTO

2024

TeleHealth Trauma Korban Bencana

PAUZI IBRAHIM NAINGGOLAN , MAYA SILVI LYDIA , DHANI SYAHPUTRA BUKIT , FAHRURROZI LUBIS

2025
Ipteks

TeleHealth Trauma Korban Bencana

PAUZI IBRAHIM NAINGGOLAN , MAYA SILVI LYDIA , DHANI SYAHPUTRA BUKIT , FAHRURROZI LUBIS

2019
Ipteks Bagi Masyarakat

Pemanfaatan Computer Based Technology dalam Meningkatkan Efisiensi Penerimaan dan Seleksi Siswa Baru

RIKA ELIANA , INDRA AULIA , IVAN JAYA , MAYA SILVI LYDIA , M AIDIEL RACHMAN P , DUWI AKBAR , MUHAMMAD PUTRA YUSZAR , ANDIKA PRASETYO , MUHAMMAD NOOR MISYUARI

Intellectual Property Rights

2024
Hak cipta nasional

APLIKASI PENDETEKSI PENYAKIT CELIAC DENGAN METODE DEEP LEARNING BERBASIS WEBSITE

SRI MELVANI HARDI , ANDREW BENEDICTUS JAMESIE , AMALIA , MAYA SILVI LYDIA

2019
Hak cipta nasional

ArDeFarm: Automatic Risk Detection System untuk Monitoring Kesehatan Petani

AINUL HIZRIADI , EKA LESTARI MAHYUNI , MAYA SILVI LYDIA , INDRA AULIA

2019
Hak cipta nasional

Aplikasi Pendeteksi Website Konten Negatif

MAYA SILVI LYDIA , AMALIA , DANI GUNAWAN