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Mr. Syahril was born in Medan, November 10, 1967. He earned his bachelor and doctor degree at the Mathematics Department of FMIPA USU, Medan while his master degree from the Department of Computer/Information Technology FTSM Universitas Kebangsaan Malaysia (UKM), Bangi, Malaysia.

Mr. Syahril is an experienced lecturer. From 1996 until now, he has taught at the Mathematics Department of FMIPA USU and the Department of Computer Science at Fasilkom-TI USU. He was also entrusted with various positions, namely: Head of RaSiO Laboratory of FMIPA USU (1996-2013), Expert Staff to the Vice Dean III of FMIPA USU (2000-2005), Secretary of Computer Science Study Program USU (2001-2006), Head of Information Systems Laboratory of Computer Science Undergraduate Study Program Fasilkom-TI USU (2005-present), Head of Informatics Engineering Diploma Study Program FMIPA USU (2010-2015), Vice Dean III Fasilkom-TI USU (2012-2018), BNSP Competency Assessor (2013-2016), and Secretary of the Computer Science Masters/Doctor Study Program Fasilkom-TI USU (2018-2021).

Apart from being a lecturer, Mr. Syahril has also served as a TATP project manager in Medan, software developer (Academic Information System software of FMIPA USU, BP-PNFI Regional I Medan Information System, Information System for Educators and Non-formal Education Personnel, Cooperative Assessment System, Home and Away System for PSSI Football Game of North Sumatra), and Consultants (Academic Team) at Balai Pengembangan Pendidikan Nonformal dan Informal (BP-PNFI) Regional I Medan.

Until now, Mr. Syahril has conducted dozens of researches in the fields of artificial intelligence, cryptography, and others. Besides being active in teaching and research activities, Mr. Syahril is also active in organizations. Mr. Syahril is the Chairman of the APTIKOM Cooperation Division for Aceh North Sumatra Region (2013-2015), the General Chair of North Sumatra Branch of IPKIN (2015-2019), the Governor of IndoMS for Aceh Sumut Region (2016-2018), the Chairman of ABDSI for North Sumatra Region (2015-2019), Member Status and Transfer of Status of North Sumatra PSSI (2005-2009), Chairman of the Competition Committee of Asprov PSSI of North Sumatra (2013-2017), Head of the North Discipline Committee of Asprov PSSI of North Sumatra (2017-2021), Governor of IndoMS of North Sumatra Aceh Region (2018-2020), and Deputy President III of Central IndoMS (2020-2022).

Mr. Syahril has participated in the PSSI Member Development Program in 2014 and 2015. Mr. Syahril's motto in life is "Reach happiness while maintaining worship, health and finances".

Publications

2026

Prosiding seminar internasional

Montessori Games to Train Children's Cognitive Development Using Augmented Reality

ULFI ANDAYANI , SYAHRIL EFENDI

2026

Prosiding seminar internasional

Performance Optimization of Ridge and Lasso Regression Algorithms in Predicting Human Body Fat Percentage

DESILIA SELVIDA , SYAHRIL EFENDI , AMMAR WAHYUDI

2025

Jurnal internasional bereputasi

IDENTIFYING THE BEST MODELS FOR BISINDO ALPHABET GESTURE CLASSIFICATION TO SUPPORT THE COMMUNICATION NEEDS OF THE DEAF COMMUNITY

ILKA ZUFRIA , T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI

2025

Jurnal internasional bereputasi

A HYBRID MULTISCALE CONVOLUTION NEURAL NETWORK WITH ATTENTION AND TEXTURE FEATURES FOR IMPROVED IMAGE CLASSIFICATION.

IRPAN ADIPUTRA PARDOSI , T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI

2025

Jurnal internasional bereputasi

Identifying the Impact of Metaperceptron in Optimizing Neural Networks: A Comparative Study of Gradient Descent and Metaheuristic Approaches

DARWIN , T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI , CARLES JULIANDY , BINARWAN HALIM

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Jurnal internasional bereputasi

EVALUATING DEEP LEARNING ARCHITECTURES FOR CO2 EMISSIONS FORECASTING: TCN, LSTM, AND HYBRID APPROACHES WITHÂ ...

RONI YUNIS , T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI

2025

Prosiding seminar internasional

A Novel Real-Time Dynamic DEA Approach for Decision Support Under Uncertain and Evolving Operational Conditions

JAMALUDDIN , SYAHRIL EFENDI , POLTAK SIHOMBING , TULUS

2025

Prosiding seminar nasional

MODEL OPTIMASI RANTAI PASOK ELEKTRONIK DENGAN BLOCKCHAIN

AFIF BADAWI , SYAHRIL EFENDI , HERMAN MAWENGGANG

2025

Jurnal internasional bereputasi

EVALUATING THE IMPACT OF WEIGHT INITIALIZATION ON RECURRENT AND TRANSFORMER-BASED MODELS IN FINANCIAL ASSET PRICE PREDICTION

T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI , ANDRI

2025

Jurnal internasional bereputasi

Development of a hybrid siamese and feedforward neural networks architecture for semantic text similarity measurement

NG POI WONG , T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI

2025

Prosiding seminar internasional

Implementation of the Clustering Using Representatives (CURE) Algorithm on Toddler Stunting Data

SYAHRIL EFENDI , AMALIA , POLTAK SIHOMBING , DEWI SARTIKA BR GINTING

2025

Prosiding seminar internasional

Cure-Sne Model Detects Outliers in Data to Optimize the Process of Clustering Using Representatives

SYAHRIL EFENDI , AMALIA , POLTAK SIHOMBING , DEWI SARTIKA BR GINTING

2025

Artikel ilmiah

The Impact of Varying Batch Sizes on The Deep Neural Network Algorithms Performance

NAEMAH MUBARAKAH , FAHMI , POLTAK SIHOMBING , SYAHRIL EFENDI

2024

Jurnal nasional

Improvement of Population Data for Kuta Mbelin Village, STM Hulu District, Deliserdang Regency to Open SID Based Population Data

2024

Prosiding seminar internasional

Keyword-Based E-Commerce Data Crawling Set Using Focused Crawler (Case Study: Aquascape Community)

MAHYUDDIN , MUHAMMAD ZARLIS , SYAHRIL EFENDI , SRI MELVANI HARDI

2024

Prosiding seminar internasional

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

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

2024

Prosiding seminar internasional

Comparison of Machine Learning Methods Using Feature Extraction Optimization PCA Method for Identification of Pineapple Maturity

NURHAYATI , SYAHRIL EFENDI , DEWI SARTIKA BR GINTING , T.HENNY FEBRIANA HARUMY , KANA SAPUTRA S , FUZY YUSTIKA MANIK

2024

Jurnal internasional bereputasi

Improving Convective Cloud Classification with Deep Learning: The CC-Unet Model

HUMUNTAL RUMAPEA , SYAHRIL EFENDI , POLTAK SIHOMBING , MUHAMMAD ZARLIS

2024

Jurnal internasional bereputasi

The role of Louvain-coloring clustering in the detection of fraud transactions

ERNA BUDHIARTI NABABAN , SYAHRIL EFENDI , SAIB SUWILO

2024

Jurnal nasional

Pelatihan Pembuatan Pakan Fermentasi untuk Peningkatan Efisiensi Peggemukan Hewan Ternak

TAMRIN , SYAHRIL EFENDI

2023

Prosiding seminar internasional

Development and Evaluation of a Portable ECG Monitoring System for Automated Classification of Normal and Abnormal ECG Signal Using Random Forest with XGBoost

ANDRIAN REINALDO CRISPIN , HERMAN MAWENGGANG , POLTAK SIHOMBING , SYAHRIL EFENDI , ABDI DHARMA

2023

Jurnal internasional bereputasi

A Decision-Making Model to Determine Dynamic Facility Locations for a Disaster Logistic Planning Problem Using Deep Learning

SYAHRIL EFENDI

2023

Jurnal nasional terakreditasi

Applying the Simplex Method to Optimize Employee Distribution to Increase Sales Internet Data Package

MULKAN AZHARI , SYAHRIL EFENDI , HALIM MAULANA

2023

Jurnal internasional bereputasi

Community Clustering on Fraud Transactions Applied the Louvain-Coloring Algorithm

SAIB SUWILO , SYAHRIL EFENDI , ERNA BUDHIARTI NABABAN

2023

Tulisan ilmiah

Taxonomy early detection of brain cancer approach ridge polynomial neural

network

BURHANUDDIN DAMANIK , RIAH UKUR GINTING , POLTAK SIHOMBING , SYAHRIL EFENDI , AMILA

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

Utilization of Information Technology as a Marketing Medium for Agricultural Products at BUMDes Liang Muda STM Hulu Deli Serdang

FAUZAN NURAHMADI , SYAHRIL EFENDI

2023

Jurnal internasional bereputasi

Optimization for Planning and Scheduling of Seafood Product which Incorporates Traceability Considerations

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Jurnal internasional bereputasi

The Role of Recurrent Convolutional Neural Network in IoT for Building a Security Artificial Intelligence and Home Assistance System

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Utilization of Information Technology as a Marketing Medium for Agricultural Products at BUMDes Liang Muda STM Hulu Deli Serdang

IVAN JAYA , SYAHRIL EFENDI , MARISCHA ELVENY , FAHRURROZI LUBIS , FAUZAN NURAHMADI

2023

Jurnal nasional terakreditasi

CONVOLUTIONAL NEURAL NETWORK OPTIMIZATION FOR DEEP WEEDS

BENNY BENYAMIN NASUTION , SYAHRIL EFENDI , WENO SYECHU

2022

Monograf

Deteksi Dini Kanker Otak Menggunakan Ridge Polynomial Neural Network di RSUP Haji Adam Malik Medan Berbasis Revolusi Industri 4.0

RIAH UKUR GINTING , POLTAK SIHOMBING , SYAHRIL EFENDI , AMILA , BURHANUDDIN DAMANIK

2022

Prosiding seminar nasional

Optimisasi Penentuan Nasabah Prioritas Dengan Menggunakan Metode Profile Matching Pada PT. Bank Pembiayaan Rakyat Syari'ah

MUHAMMAD ZARLIS , SYAHRIL EFENDI , HELMI KURNIAWAN

2022

Jurnal nasional terakreditasi

Analysis of Data classification accuracy using ANFIS algorithm modification with K-Medoids clustering

RAHMAT WIDIA SEMBIRING , SYAHRIL EFENDI

2022

Jurnal nasional

Hakikat Filsafat Dalam Ilmu Informasi Security (Keamanan Informasi)

DARA SAWITRI , MUHAMMAD ZARLIS , SYAHRIL EFENDI

2022

Jurnal internasional bereputasi

Analysis of earthquake hazards prediction with multivariate adaptive regression splines

MUHAMMAD ZARLIS , SYAHRIL EFENDI , HERMAN MAWENGGANG

2022

Jurnal internasional

Deep Learning Approach For Modelling The Spread of Covid-19

RIAH UKUR GINTING , MUHAMMAD ZARLIS , POLTAK SIHOMBING , SYAHRIL EFENDI

2022

Jurnal internasional bereputasi

Convective Cloud Classification Model for Reconstruction of Heavy Rain That Triggers the Flood and Landslide in Parapat, North Sumatera

HUMUNTAL RUMAPEA , SYAHRIL EFENDI , POLTAK SIHOMBING

2021

Jurnal internasional bereputasi

HYBRID CRYPTOSYSTEM USING RC4+ AND MULTI- FACTOR RSA ALGORITHM FOR SECURING INSTANT MESSAGING

SYAHRIL EFENDI , DIAN RACHMAWATI

2021

Jurnal internasional bereputasi

HYBRID CRYPTOSYSTEM USING RC4+ and MULTIFACTOR RSA ALGORITHM for SECURING INSTANT MESSAGING

DIAN RACHMAWATI , SYAHRIL EFENDI

2021

Prosiding seminar internasional

Prediction Using A Neural Network Algorithm Approach (A Review)

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

2020

Jurnal nasional terakreditasi

Implementation of Expert System for Detection Periodontitis Disease Using Fuzzy Logic

SRI MELVANI HARDI , SYAHRIL EFENDI

2020

Jurnal nasional

Implementation of Expert System for Detection Periodontitis Disease Using Fuzzy Logic

SRI MELVANI HARDI , SYAHRIL EFENDI

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

Jurnal internasional bereputasi

COMPARATIVE ANALYSIS of DEPTH-FIRST SEARCH ALGORITHM and GREEDY ALGORITHM at NEAREST ATM SEARCH in PADANG SIDEMPUNAN CITY

SYAHRIL EFENDI , DIAN RACHMAWATI

2020

Jurnal internasional

Feature Selection on K-Nearest Neighbor Algorithm Using Similarity Measure

RATIH PUSPADINI , HERMAN MAWENGGANG , SYAHRIL EFENDI

2019

Prosiding seminar internasional

Development Of Binary Similarity And Distance Measures (BSDM) Algorithm For The Bond Of High Development System Of Video

SYAHRIL EFENDI , CUT LIKA MESTIKA SANDY

2018

Jurnal internasional bereputasi

Modification of A priori Algorithm focused on confidence value to association rules

HERMAN MAWENGGANG , SYAHRIL EFENDI , DEWI SARTIKA BR GINTING

Researches

2025

Identifying the impact of Metaperceptron in optimizing neural networks: a comparative study of gradient descent and metaheuristic approaches

T.HENNY FEBRIANA HARUMY , SYAHRIL EFENDI , DARWIN , BINARWAN HALIM , CARLES JULIANDY

2025

Penelitian Dana Lokal Perguruan Tinggi

Pengembangan Teknologi Digital IoT dan AI Precision Farming untuk Meningkatkan Produktivitas dan Kualitas Peternakan Kambing

SYAHRIL EFENDI , YUDHISTIRA ADHITYA PRATAMA , POLTAK SIHOMBING

2025

Ipteks Bagi Masyarakat

Pengembangan Teknologi Digital IoT dan AI Precision Farming untuk Meningkatkan Produktivitas dan Kualitas Peternakan Kambing

SYAHRIL EFENDI , POLTAK SIHOMBING

2025

Penelitian Dana Lokal Perguruan Tinggi

MODEL PETERNAKAN TERPADU BERBASIS INTERNET OF THINGS (IOT) DI RAWAKEONG FARM SEBAGAI SOLUSI PRODUKSI PANGAN BERKELANJUTAN PADA LAHAN RAWA

FAUZAN NURAHMADI , SYAHRIL EFENDI , YUDHISTIRA ADHITYA PRATAMA , POLTAK SIHOMBING

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Penelitian Dana Lokal Perguruan Tinggi

Pengembangan Teknologi Digital IoT dan AI Precision Farming untuk Meningkatkan Produktivitas dan Kualitas Peternakan Kambing

SYAHRIL EFENDI , POLTAK SIHOMBING

2025

Penelitian Unggulan Perguruan Tinggi

Model Peternakan Terpadu Berbasis Internet Of Things (I OT) Di Rawakeong Farm Sebagai Solusi Produksi Pangan Berkelanjutan Pada Lahan Rawa

SYAHRIL EFENDI

2024

Penelitian Metode Algoritma Support Vector Machine (SVM) Linier Dalam Memprediksi Kelulusan Mahasiswa

HERMAN MAWENGGANG , SYAHRIL EFENDI , OKTAVIANA BANGUN

2023

Penelitian Unggulan Perguruan Tinggi

Membangun Security Artificial Intelligence pada Sistem Home Assistance Berbasis Cloud

SYAHRIL EFENDI

2022

Penelitian Disertasi Doktor

Meningkatkan Transparansi dan Akuntabilitas: Arsitektur Referensi untuk Sistem e-Government Berbasis Blockchain di Negara Berkembang

FAKHRUDDIN RIZAL BATUBARA , SYAHRIL EFENDI , MAHYUDDIN , POLTAK SIHOMBING

2022

Penelitian Tim Pasca Sarjana

Penelitian Metode Algoritma Support Vector Machine (SVM) Linier Dalam

Memprediksi Kelulusan Mahasiswa

HERMAN MAWENGGANG , SYAHRIL EFENDI , OKTAVIANA BANGUN

2022

MODEL PENGOPTIMALAN KEUNTUNGAN DALAM PREDIKSI PROFIL PELANGGAN TERHADAP BISNIS METRIK DENGAN ROBUST NONPARAMETRIC REGRESI

SYAHRIL EFENDI , MAHYUDDIN , MARISCHA ELVENY

2022

Penelitian Disertasi Doktor

Hakikat Filsafat Dalam Ilmu Informasi Security (Keamanan Informasi)

SYAHRIL EFENDI , DARA SAWITRI

2021

Model Pengoptimalan Keuntungan Dalam Prediksi Profil pelanggan terhadap Bisnis Metrik Dengan Robust Nonparametric Regresi

SYAHRIL EFENDI , MAHYUDDIN , MUHAMMAD ZARLIS , MARISCHA ELVENY

2020

Penelitian Kerjasama Antar Perguruan Tinggi

DETEKSI DINI PENYAKIT KANKER OTAK MENGGUNAKAN RIDGE POLYNOMIAL NEURAL NETWORK DI RSUP HAJI ADAM MALIK MEDAN BERBASIS REVOLUSI INDUSTRI 4.0

AMILA , SYAHRIL EFENDI , BURHANUDDIN DAMANIK , RIAH UKUR GINTING , POLTAK SIHOMBING

2015

Penelitian Hibah Bersaing

Pengukuran Efisiensi Pembangunan Dan Pengembangan ICT Tingkat Provinsi di Indone

SYAHRIL EFENDI , MUHAMMAD ANGGIA MUCHTAR , MOHAMMAD FADLY SYAH PUTRA

Community Services

2025

Pengurus Majelis Rayon Kahmi MIPA USU

SYAHRIL EFENDI , RUGAYA , LIANA DWI SRI HASTUTI

2024

Pelatihan Pembuat Pakan Domba atau Kambing Fermentasi untuk proses penggemukan hewan ternak dalam upaya peningkatan perekonomian peternak di Kampung Kunyit rawa Keong Deli Serdang

FAUZAN NURAHMADI , SYAHRIL EFENDI , TAMRIN

2024

Sistem Informasi Pemerintahan Desa Kuta Mbelin dengan Platform Sistem Informasi Desa (SID) yang Terintegrasi dan Presisi

FAUZAN NURAHMADI , SYAHRIL EFENDI

2024

Pengurus Majelis Rayon Kahmi MIPA USU

SYAHRIL EFENDI , RUGAYA

2024

Pembuatan Sistem Informasi Pemerintahan Desa Kuta Mbelin dengan Platform Sistem Informasi Desa (SID) yang Terintegrasi dan Presisi

SYAHRIL EFENDI

2023

Ipteks Bagi Masyarakat

PELATIHAN PEMBUAT PAKAN DOMBA ATAU KAMBING FERMENTASI

UNTUK PROSES PENGGEMUKAN HEWAN TERNAK DALAM UPAYA PENINGKATAN PEREKONOMIAN PETERNAK DI KAMPUNG KUNYIT RAWA KEONG DELI SERDANG

FAUZAN NURAHMADI , SYAHRIL EFENDI , TAMRIN

2023

Ipteks Bagi Masyarakat

PELATIHAN PENGGUNAAN APLIKASI PENJUALAN HEWAN TERNAK YG ADA DI KAMPUNG KUNYIT DESA TUMPATAN NIBUNG UNTUK PENINGKATAN PENDAPATAN EKONOMI

SYAHRIL EFENDI

2022

PENGEMBANGAN DESA LIANG PEMATANG KECAMATAN SINEMBAH TANJUNG MUDA HULU KABUPATEN DELI SERDANG UNTUK MEWUJUDKAN KESEJAHTERAAN MASYARAKAT PADA MASA DAN PASCA COVID-19

GUSTANTO , SYAHRIL EFENDI

2022

PENGEMBANGAN DESA LIANG PEMATANG KECAMATAN SINEMBAH TANJUNG MUDA HULU KABUPATEN DELI SERDANG UNTUK MEWUJUDKAN KESEJAHTERAAN MASYARAKAT PADA MASA DAN PASCA COVID-19

SRI MELVANI HARDI , FAUZAN NURAHMADI , SYAHRIL EFENDI , MARISCHA ELVENY

2021

Pemanfaatan Teknologi Informasi Sebagai Media Pemasaran Produk Pertanian Pada BUMDes Liang Muda STM Hulu Deli Serdang

FAUZAN NURAHMADI , SYAHRIL EFENDI , MARISCHA ELVENY , FAHRURROZI LUBIS

2021

Realitas Virtual Interaktif untuk Belajar Matematika Menyenangkan dengan Kedalaman Pemahaman di SMP Swasta Ar-Rahman Percut

HERMAN MAWENGGANG , SYAHRIL EFENDI , MULIAWAN FIRDAUS

2021

Ipteks Bagi Masyarakat

Pengembangan Desa Liang Pematang Kecamatan Sinembah Tanjung Muda Hulu Kabupaten Deli Serdang untuk Mewujudkan Kesejahteraan Masyarakat Pada Masa Pandemi Covid-19

SYAHRIL EFENDI , RAHAYU LUBIS

Intellectual Property Rights

2025

Hak cipta nasional

Pengembangan Sistem Pemantauan Cloud Pada Precision Aquaculture Dengan IoT Dan Pendekatan Artificial Intelligence

POLTAK SIHOMBING , SYAHRIL EFENDI , HERRIYANCE

2024

Hak cipta nasional

Deteksi Dini Kanker Otak Menggunakan Ridge Polynomial Neural Network di RSUP H. Adam Malik Medan Berbasis Revolusi Industri 4.0

BURHANUDDIN DAMANIK , RIAH UKUR GINTING , POLTAK SIHOMBING , SYAHRIL EFENDI , AMILA

2023

Hak cipta nasional

Model Asesmen Diagnostik Pada E-Learning Terdiferensiasi Dengan Support Machine Learning

MESRA BETTY YEL , SYAHRIL EFENDI , MUHAMMAD ZARLIS , SAIB SUWILO

2022
Hak cipta nasional

Deteksi dini kanker otak Menggunakan Ridge polynomial neural network di RSUP H. Adam Malik Medan berbasis revolusi industri 4.0

RIAH UKUR GINTING , SYAHRIL EFENDI , POLTAK SIHOMBING , AMILA , BURHANUDDIN DAMANIK

2022
Hak cipta nasional

Framework Model Smart E-Learning Berbasis Kecerdasan Buatan

MESRA BETTY YEL , MUHAMMAD ZARLIS , SYAHRIL EFENDI , SAIB SUWILO

2022
Hak cipta nasional

Perangkat Lunak Asesmen Diagnostik Smart E-Learning Berbasis Kecerdasan

MESRA BETTY YEL , MUHAMMAD ZARLIS , SYAHRIL EFENDI , RELITA BUATON
