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*Sri Melvani Hardi completed her Bachelor's and Master's degrees at Universitas Sumatera Utara, specializing in Computer Science and Informatics Engineering, graduating in 2010 and 2014. She is currently pursuing her doctoral degree in Computer Science at Universitas Sumatera Utara.*

## Publications

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2026

Prosiding seminar internasional

### **A Rank-Based Ant System for Enhancing Time Management Efficiency in Android Applications**

AMER SHARIF , SRI MELVANI HARDI , CHRISTOFFEL DANIEL Y. TAMBUNAN

2026

Prosiding seminar internasional

### **Enhanced Class Scheduling and Classroom Reservation With Improved Genetic Algorithm (IGA)**

SRI MELVANI HARDI , MARISCHA ELVENY , TAMIR RUSYDI HEGA , MUHAMMAD RIDHO HARAHAP

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

Prosiding seminar internasional

### **Educational Innovation: Predicting Graduation and Study Period Reminders Using the Multilayer Perceptrons and SVM Algorithm on Telegram**

IVAN JAYA , SRI MELVANI HARDI

2025

Prosiding seminar internasional

### **Bridal Expert System: Optimizing Wedding Service Procedures Using Certainty Factor Method**

LANOVA DWI ARDE M , AMALIA , SRI MELVANI HARDI

2025

Prosiding seminar internasional

### **Smart Ticketing: Application of Random Forest for Bus Ticket Price Prediction**

FUZY YUSTIKA MANIK , SRI MELVANI HARDI

2024

Jurnal nasional terakreditasi

### **Differentiated learning with information technology for teachers at SMA Negeri 5 Padangsidimpuan**

IVAN JAYA , SRI MELVANI HARDI , MARISCHA ELVENY , TAMIR RUSYDI HEGA , YORISTEDI PRAYOGA , MUHAMMAD SAID AGUNG NAUFAL NASUTION

2024

Prosiding seminar internasional

## **Hyperparameter Optimization of DenseNet-121 for Beta Thalassemia Major Detection on Android**

AMALIA , SRI MELVANI HARDI , HAJARANI SYADZWANA

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2024

Prosiding seminar internasional

## **EarlyStage Diabetes Risk Detection Using Comparison of Xgboost, Lightgbm, and Catboost Algorithms**

T.HENNY FEBRIANA HARUMY , SRI MELVANI HARDI

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2024

Prosiding seminar internasional

## **Decision Support System for Determining Best Job Vacancies with Edas Algorithm**

DESILIA SELVIDA , SRI MELVANI HARDI

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2024

Prosiding seminar internasional

## **Applying Genetic Algorithms Using Partially Mapped Crossover to Solve Traveling Salesman Problem (Case Study: Simalungun Rice Refinery)**

T.HENNY FEBRIANA HARUMY , SRI MELVANI HARDI

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2024

Prosiding seminar internasional

## **Analysis Diagnostic of Inguinal Hernia Disease Using Method Certainty Factor**

FIQRI RAMADHAN TAMBUNAN , SRI MELVANI HARDI , T.HENNY FEBRIANA HARUMY

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2024

Prosiding seminar internasional

## **EarlyStage Diabetes Risk Detection Using Comparison of Xgboost, Lightgbm, and Catboost Algorithms**

SRI MELVANI HARDI , T.HENNY FEBRIANA HARUMY

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2024

Prosiding seminar internasional

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T.HENNY FEBRIANA HARUMY , SRI MELVANI HARDI

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2024

Prosiding seminar internasional

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

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

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2024

Prosiding seminar internasional

## **Smart Aquascape: Fuzzy Logic Control For Real-Time Water Quality Optimization In IoT Environment**

IVAN JAYA , SRI MELVANI HARDI

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2024

Prosiding seminar internasional

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

AMALIA , SRI MELVANI HARDI , MAYA SILVI LYDIA

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2024

Jurnal nasional

## **Daycare Recommendation System Using Fuzzy Logic Method and Haversine Formula (Case Study: Medan City)**

HAYATUNNUFUS , SRI MELVANI HARDI , FRISKA PEGRISENTIA BR SIRAIT

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2024

Jurnal nasional terakreditasi

# Daycare Recommendation System Using Fuzzy Logic Method and Haversine Formula (Case Study : Medan)

SRI MELVANI HARDI , FRISKA PEGRISSENTIA BR SIRAIT , HAYATUNNUFUS

2023

Prosiding seminar internasional

## OLCBot: Dissemination Of Interactive Information Related To Indonesia'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

Prosiding seminar internasional

## OLCBot: Dissemination Of Interactive Information Related To Indonesia's Omnibus Law With The Implementation of Fuzzy String Matching Algorithm and Sastrawi Stemmer

SRI MELVANI HARDI

2022

Jurnal nasional

## Recommendation System of Component Selection for Aquascape With SMART Method

IVAN JAYA , SRI MELVANI HARDI

2021

Prosiding seminar internasional

## Classification of Beef Freshness With Color and Texture Feature Extraction Using Learning Vector Quantization Algorithm

MARISCHA ELVENY , IVAN JAYA , SRI MELVANI HARDI

2021

Prosiding seminar internasional

## Text File Compression Using Hybrid Run Length Encoding (Rle) Algorithm With Even Rodeh Code (Erc) And Variable Length Binary Encoding (Vlbe) To Save Storage Space

POLTAK SIHOMBING , MUHAMMAD ZARLIS , SRI MELVANI HARDI

2021

Prosiding seminar internasional

## Web-based E-Commerce Products Grouping

IVAN JAYA , MARISCHA ELVENY , SRI MELVANI HARDI

2021

Jurnal nasional

## Development of teaching materials based on learning video using movavi education set at Yayasan Perguruan Tunas KaryaBatang Kuis

MARISCHA ELVENY , SRI MELVANI HARDI , IVAN JAYA , MAHYUDDIN

2021

Prosiding seminar internasional

## Recognition of Hand Movement for Training Motor Skill of Children With Autism Spectrum Disorder (ASD) Using Myo Gestures Control Armband and Artificial Neural Network

SRI MELVANI HARDI , MOHAMMAD FADLY SYAH PUTRA

2021

Prosiding seminar internasional

## Heart Disease Simulation with Mixed Reality Technology

ULFI ANDAYANI , SRI MELVANI HARDI , MOHAMMAD FADLY SYAH PUTRA

2020

Prosiding seminar internasional

## Hiding and Data Safety Techniques in Bmp Image with LSB and RPrime RSA Algorithm

SRI MELVANI HARDI , IVAN JAYA , MOHAMMAD ANDRI BUDIMAN

2020

Prosiding seminar internasional

## **Expert System For Detection Glaucoma Disease Using Certainty Factor Method**

AMALIA , SRI MELVANI HARDI

2020

Prosiding seminar internasional

## **Expert System for Diagnosing Osteoarthritis with Fuzzy Tsukamoto Method**

AMALIA , SRI MELVANI HARDI

2020

Prosiding seminar internasional

## **Expert System for Detection Glaucoma Disease Using Certainty Factor Method**

ELVIWANI , SRI MELVANI HARDI

2020

Prosiding seminar internasional

## **Expert System for Diagnosing Osteoarthritis with Fuzzy Tsukamoto Method**

AMALIA , SRI MELVANI HARDI

2018

Prosiding seminar internasional

## **Research mapping in North Sumatra based on Scopus**

MAHYUDDIN , ROSMAYATI , RUNTUNG SITEPU , SRI MELVANI HARDI , DARMA BAKTI

2018

Prosiding seminar internasional

## **Software requirements elicitation to support internal monitoring of quality assurance system for hig**

DANI GUNAWAN , DIAN RACHMAWATI , SRI MELVANI HARDI , AMALIA

2017

Prosiding seminar internasional

## **Mining of the social network extraction**

MAHYUDDIN , SRI MELVANI HARDI

2017

Prosiding seminar internasional

## **A Method to Extract the Forensic about Negative Issues from Web**

MAHYUDDIN , SRI MELVANI HARDI , EMERSON PASCAWIRA SINULINGGA , RUNTUNG SITEPU

2016

Prosiding seminar internasional

## **Using social networks to assess forensic of negative issues**

SRI MELVANI HARDI , RUNTUNG SITEPU , MAHYUDDIN

## **Researches**

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2024

## **Penerapan Metode CF dalam Sistem Penentuan Kelayakan Calon Pengantin dalam Peningkatan Standar Prosedur Pelayanan Perkawinan (SP3) pada Dinas PPKB Kota Tebing Tinggi**

SRI MELVANI HARDI , LANOVA DWI ARDE M , AMALIA

2023

## **EFISIENSI PENJADWALAN KULIAH DAN PEMESANAN RUANGAN KELAS MENGGUNAKAN IMPROVED GENETIC ALGORITHM (IGA)**

SRI MELVANI HARDI , MARISCHA ELVENY

2023

## **Sistem Cerdas Aquascape melalui Integrasi IoT dan Dashboard Interaktif**

SRI MELVANI HARDI , IVAN JAYA

2022

## **CRAWLING DATA SET E-COMMERCE BERBASIS KATA KUNCI MENGUNAKAN FOCUSED CRAWLER (STUDI KASUS : KOMUNITAS AQUASCAPE**

SRI MELVANI HARDI , IVAN JAYA

2021

Penelitian Dana Lokal Perguruan Tinggi

## **Sistem Rekomendasi Pemilihan Komponen Dalam Pembuatan Aquascape Dengan Metode SMART**

SRI MELVANI HARDI , IVAN JAYA , MUHAMMAD RIVALDI ZULVIE

2021

Penelitian Unggulan Perguruan Tinggi

## **Penerapan Aplikasi Permainan Pre-Coding Social Story untuk Terapi Anak Berkebutuhan Khusus**

SRI MELVANI HARDI , SENIMAN , MOHAMMAD FADLY SYAH PUTRA , ENIKE DEWINTA SEMBIRING , SYARIFAH ATIKA

2020

Penelitian Unggulan Perguruan Tinggi

## **APLIKASI PENENTUAN JUMLAH BUBBLE PER SECOND (BPS) UNTUK INJEKSI KARBON DIOKSIDA DALAM AQUASCAPE MENGGUNAKAN ALGORITMA ASSOCIATION RULE**

SRI MELVANI HARDI , MAHYUDDIN , MARISCHA ELVENY , IVAN JAYA

2020

Penelitian Unggulan Perguruan Tinggi

## **Penerapan Aplikasi Permainan Pre-Coding Social Story untuk Terapi Anak Berkebutuhan Khusus**

SRI MELVANI HARDI , SENIMAN , MOHAMMAD FADLY SYAH PUTRA , SYARIFAH ATIKA , ENIKE DEWINTA SEMBIRING

2019

Penelitian Unggulan Perguruan Tinggi

## **IDENTIFIKASI PENYAKIT TUBERCULOSIS (TB) BERDASARKAN FOTO RONTGEN PARU-PARU DENGAN MENGGUNAKAN EXTREME LEARNING MACHINE**

SRI MELVANI HARDI , MAHYUDDIN , MARISCHA ELVENY , IVAN JAYA

2018

Penelitian Dana Lokal Perguruan Tinggi

## **PENGELOMPOKAN PRODUK E-COMMERCE BERBASIS WEB**

SRI MELVANI HARDI , MARISCHA ELVENY , IVAN JAYA

2018

Penelitian Dana Lokal Perguruan Tinggi

## **Penelitian Dosen Muda, Talenta, Universitas Sumatera Utara**

SRI MELVANI HARDI , MARISCHA ELVENY , IVAN JAYA

2017

## **OPENLOBBY: APLIKASI SERVER UNTUK PENGEMBANGAN FITUR MULTIPLAYER PADA GAME**

SRI MELVANI HARDI , ELVIAWATY MUISA ZAMZAMI

## **Community Services**

2023

## **Pembelajaran Diferensiasi Sebagai Metode Pembelajaran Terbaru Dengan Memaksimalkan Potensi Teknologi Informasi Melalui Pendekatan Blended Learning Di SMA N 5 Padang Sidempuan”**

SRI MELVANI HARDI , MARISCHA ELVENY

2022

Ipteks Bagi Masyarakat

# **PENGEMBANGAN DAN PEMANFAATAN SISTEM INFORMASI MANAJEMEN KEUANGAN SEKOLAH DASAR ISLAM TERPADU PRIMA MANDIRI**

SRI MELVANI HARDI , MAHYUDDIN , MUHAMMAD ZARLIS , MARISCHA ELVENY , IVAN JAYA , YORISTEDI PRAYOGA , MUHAMMAD IQBAL ALDEENA , TAMIR RUSYDI HEGA

2020

Ipteks Bagi Masyarakat

## **PENGEMBANGAN BAHAN AJAR INTERAKTIF BERBASIS VIDEO KREATIF DENGAN MOVAVI EDUCATION SET DI YAYASAN PERGURUAN TUNAS KARYA BATANG KUIS**

SRI MELVANI HARDI , MAHYUDDIN , MARISCHA ELVENY , IVAN JAYA

2020

## **PENGEMBANGAN BAHAN AJAR INTERAKTIF BERBASIS VIDEO KREATIF DENGAN MOVAVI EDUCATION SET DI YAYASAN PERGURUAN TUNAS KARYA BATANG KUIS**

SRI MELVANI HARDI , MAHYUDDIN , MARISCHA ELVENY , IVAN JAYA

2019

Ipteks Bagi Masyarakat

## **Pemanfaatan Media Sosial Sebagai Brand Identity dan Digital Marketing di SMK Swasta Nur Azizi**

SRI MELVANI HARDI , MARISCHA ELVENY , IVAN JAYA

2019

Ipteks Bagi Masyarakat

## **PEMANFAATAN E-LEARNING SEBAGAI MEDIA PEMBELAJARAN BERBASIS EDMODO PADA SMA NEGERI 5 PADANG SIDEMPUAN**

SRI MELVANI HARDI , MAHYUDDIN , MARISCHA ELVENY

## **Intellectual Property Rights**

2025

Hak cipta nasional

## **PredictaCycle: Prediktor Kesehatan dan Masa Pakai Baterai Berbasis Kecerdasan Buatan untuk Penggunaan Laptop Berkelanjutan**

SRI MELVANI HARDI , AMALIA

2024

Hak cipta nasional

## **APLIKASI PENDETEKSI PENYAKIT CELIAC DENGAN METODE DEEP LEARNING BERBASIS WEBSITE**

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

2023

Hak cipta nasional

## **Sistem Crawler Data Set E-Commerce Berbasis Kata Kunci Menggunakan Focused Crawler**

IVAN JAYA , AMALIA , SRI MELVANI HARDI

2022

Hak cipta nasional

## **Sistem Rekomendasi Pemilihan Komponen Dalam Pembuatan Aquascape Dengan Metode SMART**

SRI MELVANI HARDI , IVAN JAYA

2020

Hak cipta nasional

## **PENERAPAN APLIKASI PERMAINAN PRE-CODING SOCIAL STORY UNTUK TERAPI ANAK BERKEBUTUHAN KHUSUS**

MOHAMMAD FADLY SYAH PUTRA , SRI MELVANI HARDI , SENIMAN

2020

Hak cipta nasional

## **Penerapan Teknologi Mix Reality Untuk Visualisasi Penyakit Jantung**

ANDRE PASHA KETAREN , ULFI ANDAYANI , MOHAMMAD FADLY SYAH PUTRA , SRI MELVANI HARDI

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2020

Hak cipta nasional

## **Pengenalan Gesture Tangan untuk melatih motorik anak autisme menggunakan MYO Gesture Armband**

SRI MELVANI HARDI , MOHAMMAD FADLY SYAH PUTRA

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2020

Hak cipta nasional

## **Aplikasi Kompresi File Citra Dengan Metode Golbach Code Dan Boldi Vigna**

SRI MELVANI HARDI

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2020

Hak cipta nasional

## **SIPENJAL: Sistem Pakar Diagnosis Penyakit Ginjal**

SRI MELVANI HARDI

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2020

Hak cipta nasional

## **SIPENDOTIS: Sistem Pakar Diagnosis Penyakit Periodontitis Terhadap Perokok Aktif**

SRI MELVANI HARDI

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2020

Hak cipta nasional

## **SIPENKUJA: Sistem Pakar Diagnosis Penyakit Kulit Wajah**

SRI MELVANI HARDI

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2020

Hak cipta nasional

## **SIPETIS: Sistem Pakar Penyakit Osteoarthritis**

SRI MELVANI HARDI

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2019

Hak cipta nasional

## **SITI: Sistem Identifikasi Tuberkulosis**

SRI MELVANI HARDI , IVAN JAYA , MARISCHA ELVENY , MAHYUDDIN

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