Poltak Sihombing

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Prof. Dr. Poltak Sihombing, M.Kom, Ph.D., was born in Sidikalang (Dairi), on March 17, 1962. He obtained his Bachelor degree from Physics (Computer Concentration Course), Universitas Sumatera Utara in 1988 with a thesis titled, “Penggunaan Micro-System Troubleshooter Pada Instrumen Yang Memakai Mikroprosesor", he then completed his Master study in Computer Science (Universitas Indonesia) in 1999 with a thesis titled, "Sistem Temu-Kembali Informasi Menggunakan Jaringan Syaraf Tiruan dengan Beberapa Ukuran Kemiripan". He then earned his doctorate at Universitas Sains Malaysia Computer Science in 2010 with a dissertation titled, “Keyword Competition Approach in Ranked Document Retrieval”.

Prof. Dr. Poltak Sihombing, M. Kom, Ph.D. is a lecturer at Fasilkom-TI until now and has served as chairman of the Computer Science Undergraduate Study Program in 2011-2016 and 2016-2021. He is one of the lecturers who actively contributes and participates in several organizations as Secretary General, Assosiasi Pendidikan Tinggi Informatika Komputer Wilayah1 Sumut-Aceh (APTIKOMWIL1) SUMUT-ACEH Medan (2014-2019), Member of Himpunan Fisikawan Indonesia (HFI) Medan (2017-2022), Member of Ikatan Profesi Komputer Informatika (IPKIN) (2018-2023), Head of the North Sumatra Province, Assosiasi Pendidikan Tinggi Informatika Komputer Wilayah1 Sumut-Aceh (APTIKOMWIL1) North Sumatra Province Medan (2019-2024), Member ofAnggota Ikatan Ahli Informatika Indonesia (IAII) for North Sumatra Province Medan (2019-2024). He was also appointed as one of the reviewers at the International Conference on Cyber Physical, Computer, and Automation Systems. CPCAS2019

Currently, he is pursuing several research fields, including microcontrollers, intelligent systems, information retrieval systems, and the internet of things. Some of his ongoing research (in 2021) include: Tools for Detecting and Controlling Building Security Disruptions With Sim900, Tools for Detecting and Controlling Nutrient Flow of Hydroponic Plants With Esp8266 Circuit Module, Citrus Fruit Sorting Tool Using Tcs320 Sensor and Arduino Uno Microcontroller, Esp8266 Circuit Data Communication Device In Real Time To Detect And Control Heart Rate. In addition, he published two books entitled Visual Basic 6.0 (2017), A-Z MIKROKONTROLLER 8051, Hardware, Interfaces, Programming and Applications (2018).

DREAM AS HIGH AS POSSIBLE, AND AFTER DREAMING THERE MUST BE THE BELIEF TO MAKE IT HAPPEN. BELIEVE THAT YOU CAN DO IT. DREAM, BELIEVE, MAKE IT HAPPEN.

Publications

2026
Jurnal internasional bereputasi

Diffusion2D and Anchored Inference for Asymptotic Stabilization of Diffusion-Convolutional Neural Networks in Multidomain Medical Image Classification

SUTARMAN , POLTAK SIHOMBING , MOHAMMAD ANDRI BUDIMAN

2026
Jurnal internasional bereputasi

K-Cube Consensus Clustering with Centroid Improvement and Variance-Based Metrics on High-Dimensional Data

SUTARMAN , POLTAK SIHOMBING , MOHAMMAD ANDRI BUDIMAN

2025
Jurnal internasional bereputasi

SAGOMECON: An Adaptive Îµ-Constraint-Based Optimization Method for Multi-Criteria Decision-Making in Collaborative Industrial Networks

POLTAK SIHOMBING

2025
Jurnal internasional bereputasi

Advancements in Detection Top Influencer Marketing in the Airline Industry:

A Combination of the Leiden Algorithm and Graph Coloring

POLTAK SIHOMBING

2025
Jurnal internasional bereputasi

Two-Level Hierarchical Adaptive Dynamic Fusion for CNNâLSTM Integration in Fatigue Level Prediction

POLTAK SIHOMBING

2025
Jurnal internasional bereputasi

Mathematical Modeling of Water Quality Dynamics in Aquaculture: A Foundation for IoT Integration and Machine Learning-Driven Predictive Analytics

POLTAK SIHOMBING

2025
Jurnal internasional bereputasi

An IoT-Enabled Smart System Utilizing Linear Regression for Sheep Growth and Health Monitoring

POLTAK SIHOMBING

2025
Jurnal internasional bereputasi

Portable Holter with Cloud-Based Learning Analytics for Real-Time Health Monitoring

POLTAK SIHOMBING

2023
Prosiding seminar internasional

Smart Home Design Based on IoT and Context Aware Model ICAM

POLTAK SIHOMBING , ARJON TURNIP

2023
Jurnal internasional bereputasi

Design of smart farming communication and web interface using MQTT and Node.js

POLTAK SIHOMBING , ARJON TURNIP , ENDRA JOELIANTO , TUALAR SIMARMATA

2023
Jurnal internasional bereputasi

Taxonomy early detection of brain cancer approach ridge polynomial neural network

POLTAK SIHOMBING

2023
Jurnal internasional bereputasi

MEASURING THE ACCURACY OF SEARCH INTERVAL PARAMETERS ON RIDGE POLYNOMIAL NEURAL NETWORK IN EARLY DETECTION OF BRAIN CANCER

POLTAK SIHOMBING

2023
Jurnal internasional bereputasi

Comparison Analysis of Weighting Using Fuzzy Logic and Centroid Order Rank (ROC) on Simple Additive Weighting (SAW) Method

POLTAK SIHOMBING

2023
Jurnal internasional bereputasi

Analysis of the quantum perceptron algorithm for classification of bank marketing data

POLTAK SIHOMBING

2023
Jurnal nasional terakreditasi

Pemrosesan Query dan Pemeringkatan Hasil dalam Information Retrieval: Sebuah Kajian Literatur

MAHDIANTA PANDIA , POLTAK SIHOMBING , ROBERTO KABAN

2022
Jurnal internasional bereputasi

Hierarchical Of Grid Partition (HGP) For Measuring The Similarity Of Data In Optimizing Data Accuracy

VERDI YASIN , MUHAMMAD ZARLIS , OPIM SALIM SITOMPUL , POLTAK SIHOMBING

2022
Jurnal internasional bereputasi

Optimisasi Quantum Circuit pada Arsitektur Quantum Perceptron untuk Klasifikasi Data

POLTAK SIHOMBING

2022
Jurnal internasional bereputasi

Weighting Comparative Analysis Using Fuzzy Logic and Rank Order Centroid (ROC) in the Simple Additive Weighting (SAW) Method

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

Measurement Model In Optimizing The Certainty Of Accurate Data Similarity With The Hierarchy Of Partition Grid Method (HGP)

VERDI YASIN , MUHAMMAD ZARLIS , POLTAK SIHOMBING , OPIM SALIM SITOMPUL

2021
Jurnal internasional bereputasi

Comparison of Distance Models on K-Nearest Neighbor Algorithm in Stroke Disease Detection

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

Analyzed New Design Data Driven Modelling of Piezoelectric Power Generating System

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

MODELING OF THE OPTIMIZATION FOR DISTRIBUTED SQUENTIAL SCHEDULING IN SUSTAINABLE MANUFACTURING

POLTAK SIHOMBING

2021
Jurnal nasional terakreditasi

Peningkatan Nilai Keanggotaan Model Segitiga Samakaki Pada Metode Mamdani Dengan Menggunakan Defuzzyfication Mean Of Maximum (MOM)

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

PENERAPAN RIDGE POLYNOMIAL NEURAL NETWORK UNTUK MENCEGAH PENYAKIT KANKER OTAK

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

Optimization of the CNN model for smart agriculture

POLTAK SIHOMBING

2021
Jurnal internasional bereputasi

New quantum circuit architecture for classifying big data

POLTAK SIHOMBING

2021
Prosiding seminar internasional
A cryptocompression system with Multi-Factor RSA algorithm and Levenstein code algorithm
MOHAMMAD ANDRI BUDIMAN , POLTAK SIHOMBING

2021
Jurnal internasional bereputasi
A cryptocompression system with Multi-Factor RSA algorithm and Levenstein code algorithm
POLTAK SIHOMBING

2021
Jurnal internasional bereputasi
Implementation of Image Security using Elliptic Curve Cryptography RSA Algorithm and Least Significant Bit Algorithm
POLTAK SIHOMBING

2021
Jurnal internasional bereputasi
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

2021
Jurnal internasional bereputasi
New Architecture Quantum Perceptron using Quantum Circuit
POLTAK SIHOMBING

2021
Jurnal internasional bereputasi
Development Environment of Machine Learning for Image Classification
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi
Capacitated multi depot multi vehicle routing problem using genetic algorithm (case study: watering the medan city park)
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi
Raspberry-Pi as Portable Web Server E-Learning Moodle for Student Learning and Assignment
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi
Analysis of Attribute Reduction Effectiveness on the Naive Bayes Classifier Method
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi
Genetic Algorithm in Image Inserting with Modified Least Significant Bit Method to Find the Best MSE Value
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi
Analysis of Accuracy Improvement in K-Nearest Neighbor using Principal Component Analysis (PCA)
POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Ant Colony Optimization (ACO) Algorithm for Determining the Nearest Route Search in Distribution of Light Food Production

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

The Development of Heart Rate Detection Using Arduino Microcontroller and Android

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Implementation of Best First Search Algorithm in Determining Best Route Based on Traffic Jam Level in Medan City

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Implementation of the Greedy Algorithm to determine the nearest route Search in distributing food production

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Hybrid of Support Vector Machine Algorithm and K-Nearest Neighbor Algorithm to Optimize the Diagnosis of Eye Disease

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Analysis of Face Recognition with Fuzzy C-Means Clustering Image Segmentation and Learning Vector Quantization

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Robotic Arm Controlling Based on Fingers and Hand Gesture

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Expert System for Diagnosing Dental and Mouth Diseases with a Website-Based Certainty Factor (CF) Method

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Comparative Analysis of Fuzzy Inference Tsukamoto Mamdani and Sugeno in the Horticulture Export Selling Price

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Node-based versus Server-based Data Validations in Internet of Things

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Hierarchy of Grid Partition (HGP) Integrating data in Software Engineering and databases

POLTAK SIHOMBING

2020
Jurnal internasional

The Development of Document Similarity Detector by Jaccard Formulation

POLTAK SIHOMBING , EDWARD RAJAGUKGUK , DARWIS ROBINSON MANALU , RIMBUN SIRINGORINGO

2020
Jurnal internasional bereputasi

Special issue on international conference on informatics, robotics, network, control and systems (IRONCONS)

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Optimization of K Value at the K-NN algorithm in clustering using the expectation maximization algorithm

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Performance of distance-based k-nearest neighbor classification method using local mean vector and harmonic distance

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Analysis SURF feature extraction and SVM classification for the facial image recognition from various angles

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Analysis of algorithm support vector machine learning and k-nearest neighbor in data accuracy

POLTAK SIHOMBING

2020
Jurnal internasional bereputasi

Increased accuracy in the classification method of backpropagation neural network using principal component analysis

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Embedding the Operating System : A Case Study LMDE 3 on a USB Flash Drive

POLTAK SIHOMBING

2019
Jurnal internasional

Embedding the Operating System : a Case Study LMDE 3 on a USB Flash Drive

PAHALA SIRAIT , POLTAK SIHOMBING , IRWAN JANI TARIGAN

2019
Jurnal internasional bereputasi

The Citrus Fruit Sorting Device Automatically Based On Color Method By Using Tcs320 Color Sensor And Arduino Uno Microcontroller

NOGAR SILITONGA , POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Tools for Detecting and Control of Hydroponic Nutrition Flows with Esp8266 Circuit Module

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Predictions of World Population Life Expectancy Using Cyclical Order Weight / Bias

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Time Resolved Spectroscopy Using Boxcar Integrator

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Tools for Detecting and Control of Soil pH by Probe Sensor based on Android

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Collaboration of RSA Algorithm Using EM2B Key with Word Auto Key Encryption Cryptography Method in Encryption of SQL Plaintext Database

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Skin Diseases Classification Using Local Binary Pattern and Convolutional Neural Network

POLTAK SIHOMBING

2019
Jurnal nasional terakreditasi

Rancangan Miniatur Otomatisasi Bel Listrik Pada Gerbang Pintu Menggunakan Microkontroler Atmega8535

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Embedding the Operating System: A Case Study LMDE 3 on a USB Flash Drive

POLTAK SIHOMBING

2019
Jurnal nasional terakreditasi

Performance Analysis Of Entropy Method In Determining Influence Of Self Organizing Map In Classification Process

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Predictions of World Population Life Expectancy Using Cyclical Order Weight/Bias

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

The Heart Attack Detection by ESP8266 Data Communication at a Real Time to Avoid Sudden Death

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

The Student Attendance Controlling by Using RFID (Radio Frequency Identification) to Increase the Time Optimization and Accurate of Data

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

The Student Attendance Controlling Based on Face Recognition by using Learning Vectorization Quantization (LVQ) Algorithm

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Enhancement Clustering Evaluation Result of Davies-Bouldin Index with

Determining Initial Centroid of K-Means Algorithm

POLTAK SIHOMBING

2019
Jurnal internasional bereputasi

Internet of Things based Nutrition Controlling System Development

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Optimizing the 802.11 hotspot performances by using load and resource balancing method

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Performance of BAM algorithm and Viterbi algorithm for lie detection system using voice

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Load balancing factor using greedy algorithm in the routing protocol for improving internet access

POLTAK SIHOMBING

2018
Jurnal nasional terakreditasi

Analisis Contrast Stretching Menggunakan Algoritma Euclidean untuk Meningkatkan Kontras pada Citra Berwarna

POLTAK SIHOMBING

2018
Jurnal nasional

Analisis Subspace Clustering Menggunakan DBSCAN Dan SUBCLU Untuk Proyeksi Pekerjaan Alumni Perguruan Tinggi

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

A teaching media of using the busy bit and SDCC in displaying character string on LCD in MCU 8051 IDE

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Comparison AHP and SAW to promotion of head major department SMK Muhammadiyah 04 Medan

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Classification of ECG signal with Support Vector Machine Method for Arrhythmia Detection

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Development of building security integration system using sensors, microcontroller and GPS (Global Positioning System) based android smartphone

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Microcontroller based automatic temperature control for oyster mushroom

plants

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Automated hydroponics nutrition plants systems using arduino uno microcontroller based on android

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Characterization of outdoor to indoor propagation in urban area by using a combination of COST231 Walfisch-Ikegami and COST231 multiwall models in 1800 Mhz and 2100 Mhz

POLTAK SIHOMBING

2018
Jurnal internasional bereputasi

Analysis of combination of Kohonen algorithm and resilient Backpropagation in weighting process

POLTAK SIHOMBING

2017
Jurnal internasional bereputasi

Design of extraction method of SSVEP brain activity with IIR Chebyshev

POLTAK SIHOMBING

2017
Jurnal internasional bereputasi

Artifacts reduction of EEG-SSVEP signals for emotion detection with robust principal component analysis

POLTAK SIHOMBING

2017
Jurnal internasional bereputasi

Backpropagation neural networks training for EEG-SSVEP classification of emotion recognition

POLTAK SIHOMBING

2016
Jurnal internasional bereputasi

The Similarities Test of Thesis by Percentage of Similarity Formulation

POLTAK SIHOMBING

2016
Jurnal internasional

The Development of Document Similarity Detector by Jaccard Formulation

EDWARD RAJAGUKGUK , POLTAK SIHOMBING , DARWIS ROBINSON MANALU , RIMBUN SIRINGORINGO

2014
Jurnal internasional bereputasi

DESIGNING A TTL VOLTAGE LEVEL LOGIC PROBE BY USING COMMON CATHODE SEVEN SEGMENT DISPLAY AND AN INVERTING LOGIC GATE ON PROTEUS ISIS 7 PROFESSIONAL [8]

POLTAK SIHOMBING

2012
Jurnal nasional

Optimalisasi Pemanfaatan Teknologi Informasi dan Komunikasi (ICT) sebagai Peluang di Era Globalisasi Ekonomi

POLTAK SIHOMBING

2006
Jurnal internasional bereputasi

Comparison of document similarity in information retrieval system by different formulation

POLTAK SIHOMBING

2005
Jurnal internasional bereputasi

Application of Genetic Algorithm to Determine a Document Similarity Level in IRS

POLTAK SIHOMBING

1999
Jurnal nasional terakreditasi

Sistem Temu-Kembali Informasi Menggunakan Jaringan Syaraf Tiruan Dengan Beberapa Ukuran Kemiripan

POLTAK SIHOMBING

2026
Jurnal internasional bereputasi

An Analysis Of Cash On Delivery (COD) Purchase Classification Using the C4. 5 and ID3 Algorithms

POLTAK SIHOMBING

2026
Jurnal internasional bereputasi

ENHANCED OF ANALYSED OPTIMIZATION LEARNING MODEL FOR MULTI PRODUCT RETAIL AND DISTRIBUTION SYSTEM

POLTAK SIHOMBING

2026
Jurnal internasional bereputasi

Erna Budhiarti Nababan, MIT Erwin Setiawan Panjaitan Esam Yassen F

POLTAK SIHOMBING

2026
Jurnal nasional terakreditasi

Sentiment Analysis of Food Order Tweets to Find Out Customer Demographic Profile using SVM

POLTAK SIHOMBING

Researches

2024
Ipteks

Assessing the influence of USB-C and USB-A Local Area Network (LAN) Cable Connector Adapters on Internet Latency Performance

Dahlan RP. Sitompul , POLTAK SIHOMBING

2021
Penelitian Dana Lokal Perguruan Tinggi

SMART SYSTEM UNTUK MENCEGAH KEBAKARAN HUTAN BERBASIS IoT (Internet of Things)

POLTAK SIHOMBING

2021
Penelitian Kerjasama Antar Perguruan Tinggi

ARTIFICIAL INTELLIGENCE PRECISION FARMING UNTUK MENINGKATKAN PRODUKTIFITAS DAN KUALITAS TANAMAN CABAI

POLTAK SIHOMBING

2021
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

POLTAK SIHOMBING

2020
Penelitian Dana Lokal Perguruan Tinggi

MENGGERAKKAN ROBOT UNTUK MENGONTROL OBJEK MENGGUNAKAN GESTUR TANGAN DENGAN LOGIKA FUZZY

POLTAK SIHOMBING

2019
Penelitian Dana Lokal Perguruan Tinggi

Optimasi Traveling Salesman Problem (TSP) Menggunakan Algoritma Ant Colony Optimization dan Tabu Search

POLTAK SIHOMBING

2019
Pendidikan Magister Doktor Sarjana Unggul

Klasifikasi Penyakit Kulit pada Citra Digital menggunakan Local Binary Pattern (LBP) dan Convolutional Neural Network (CNN)

POLTAK SIHOMBING

2019
Pendidikan Magister Doktor Sarjana Unggul

ANALISIS PENGANGKATAN BENDA PADA ROBOT KONTROL ANDROID DENGAN METODE FUZZY LOGIC

POLTAK SIHOMBING

2019
Penelitian Dana Lokal Perguruan Tinggi

PENGEMBANGAN SISTEM KONTROL OTOMATIS UNTUK MENGONTROL NUTRISI BERBASIS IoT (Internet of Things)

POLTAK SIHOMBING

2019
Pendidikan Magister Doktor Sarjana Unggul

Optimasi Traveling Salesman Problem (TSP) Menggunakan Algoritma Ant Colony Optimization dan Tabu Search

POLTAK SIHOMBING

2019
Penelitian Dana Lokal Perguruan Tinggi

PENGEMBANGAN SISTEM KONTROL OTOMATIS UNTUK MENGONTROL Ph TANAH MENGGUNAKAN MIKROKONTROLLER

POLTAK SIHOMBING

2018
Penelitian Dana Lokal Perguruan Tinggi

Pengembangan Metode Integrasi Radio Frequensi Identification (RFID) Dan Mikrokontroller ARDUINO UNO Untuk Membangun Sistem Keamanan Database Mahasiswa dan Ruangan

POLTAK SIHOMBING

2018
Penelitian Disertasi Doktor

Pengembangan Metode Local Outlier Factor (LOF) Berbasis Pruned Partisi Dengan Memperhatikan Jarak Ketercapaian Deteksi pada Data Stream

MUHAMMAD ZARLIS , OPIM SALIM SITOMPUL , POLTAK SIHOMBING , VERDI YASIN

2017
Penelitian Unggulan Perguruan Tinggi

Sistem Nutrisi Hidroponik Secara Otomatis Menggunakan Mikrokontroller Arduino Uno Berbasis Smartphone Android

POLTAK SIHOMBING

2017
Penelitian Dana Lokal Perguruan Tinggi

SISTEM KEAMANAN GEDUNG DENGAN METODE RASPBERRY PI PADA MIKROKOMPUTER DENGAN MENGGUNAKAN KAMERA SENSOR PIR DAN

SENSOR GETAR

POLTAK SIHOMBING

2016

Penelitian Hibah Bersaing

MENGUJI KEMIRIPAN SKRIPSI DENGAN FORMULASI POSI (PERCENTAGE OF SIMILARITY)-TAHUN II

POLTAK SIHOMBING

2016

Penelitian Unggulan Perguruan Tinggi

Integrasi Radio Frequency Identification (RFID) pada board Mikrokontroller Arduino Uno untuk sistem absensi mahasiswa di Fakultas Ilmu Komputer dan Teknologi Informasi (Fasilkom-TI) USU

POLTAK SIHOMBING

2014

Penelitian Dana Lokal Perguruan Tinggi

Perancangan Sistem Dengan Pemanfaatan Algoritma Genetika Untuk Optimasi Perolehan Kemiripan Dokumen. (PNBP USU)

POLTAK SIHOMBING

Community Services

2021

Ipteks

PENGABDIAN MASYARAKAT DI SMP NEGERI PANCURBATU-SUMBER DANA NON PNBP USU T.A. 2021

POLTAK SIHOMBING

2015

Ipteks

PENGEMBANGAN BAHAN AJAR GURU SEKOLAH DASAR ISLAM ASH-SHOLIHAH BERBASIS MULTIMEDIA DENGAN MENGGUNAKAN SOFTWARE ULEAD VIDEO STUDIO 11

POLTAK SIHOMBING

2014

Ipteks

PEMBINAAN DAN PENGKARYAAN ROBOTIKA SEDERHANA DI SMK MULTI KARYA MEDAN

POLTAK SIHOMBING

2012

Ipteks Bagi Masyarakat

PELATIHAN TENTANG â€œPEMANFAATAN ICT DALAM PEMBELAJARANâ€ DI SMA NEGERI PARONGIL KEC. SILIMA PUNGGA-PUNGGA KAB. DAIRI

POLTAK SIHOMBING

2010

Ipteks Bagi Masyarakat

PKM Pada SMA Negeri 1 Doloksanggul (Pelatihan Operasional Sistem Informasi Sekolah dan Kegunaan Internet dan Sistem Informasi sebagai media pembelajaran)

DARWIS ROBINSON MANALU , POLTAK SIHOMBING

Intellectual Property Rights

2020

Hak cipta nasional

Pemrograman Visual Basic 6.0

POLTAK SIHOMBING , DARWIS ROBINSON MANALU

2018
Hak cipta internasional

A-Z MIKROKONTROLLER 8051 (perangkat keras, antar muka, pemrograman dan aplikasi)

POLTAK SIHOMBING