Dr. Ir. Tigor Hamonangan Nasution, S.T., M.T., IPM

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Ir. Tigor Hamonangan Nasution, S.T, M.T. was born in Medan on April 15, 1985. He is an Electrical Engineering lecturer at Universitas Sumatera Utara. He completed his last education at the Master's level in the Electrical Engineering Study Program at Universitas Sumatera Utara in 2012.

Publications

2026
Jurnal internasional bereputasi

Leakage-Aware and Stability-Focused Benchmarking of Engineered and Learned Representations for Limited-Session Electronic-Nose Coffee Quality Classification

TIGOR HAMONANGAN NASUTION , Yoga Pratama , ARIF RIDHO LUBIS , MASAGUS HAIDIR TAMIMI , FAHMI , MUHFI ASBIN SAGALA , PAUZI IBRAHIM NAINGGOLAN , Muhammad Al'hapis Abdul Razak

2026
Jurnal internasional bereputasi

Mobile device application design for ThingSpeak interface using flutter

TIGOR HAMONANGAN NASUTION , Moehammad Sauqy Ihza Zuliandra , SENIMAN

2026
Jurnal internasional bereputasi

Architectural design of an internet of things-based framework for road bike speed optimization

OPIM SALIM SITOMPUL , FAHMI , MUHAMMAD ANGGIA MUCHTAR , TIGOR HAMONANGAN NASUTION

2026
Prosiding seminar internasional

Device Protection and Tracking System For Pet With Tamper Sensor and Global Positioning System

DEDY ARISANDI , TIGOR HAMONANGAN NASUTION , SENIMAN , FANINDIA PURNAMASARI , FAHRURROZI LUBIS , SITI RAHMA YANI

2026
Jurnal internasional bereputasi

Comparative Analysis of Artificial Intelligence Algorithms for Optimizing IoT and Big Data Frameworks in Road Bike Applications

TIGOR HAMONANGAN NASUTION , OPIM SALIM SITOMPUL , FAHMI , MUHAMMAD ANGGIA MUCHTAR

2025
Prosiding seminar internasional

Design of an Automatic Rainwater Drainage System for Nutrient Film Technique Hydroponic Plants

MUHFI ASBIN SAGALA , Eriko , TIGOR HAMONANGAN NASUTION

2025
Prosiding seminar internasional

Evaluation of Machine Learning Models for Heart Rate Data Imputation from

Wearable Devices

TIGOR HAMONANGAN NASUTION , OPIM SALIM SITOMPUL , FAHMI , MUHAMMAD ANGGIA MUCHTAR

2025
Prosiding seminar internasional

A Wi-Fi IR Blaster with On-Device Learning and a Flutter App for Multi-Brand Appliance Control

MUHFI ASBIN SAGALA , DEVID SUWANTO , TIGOR HAMONANGAN NASUTION

2025
Jurnal internasional bereputasi

The implementation of the K-nearest neighbor algorithm to detect the KRSRI robot obstacles

TIGOR HAMONANGAN NASUTION , SENIMAN , ARZA MUHAMMAD PRIHANDOYO

2025
Jurnal internasional bereputasi

The implementation of the K-nearest neighbor algorithm to detect the KRSRI robot obstacles

TIGOR HAMONANGAN NASUTION , SENIMAN , ARZA MUHAMMAD PRIHANDOYO

2024
Prosiding seminar internasional

Design of Wheelchair using Body Position Tracking Designed For Paralyzed Patients

AWALUDIN RIZKI SAMOSIR , TIGOR HAMONANGAN NASUTION , FAHMI

2024
Prosiding seminar internasional

Design of a robot to automatically measure human temperature indoors

ARZA MUHAMMAD PRIHANDOYO , TIGOR HAMONANGAN NASUTION , SENIMAN

2024
Prosiding seminar internasional

Design of An Automatic Package Receiving System

INDRA AULIA , TIGOR HAMONANGAN NASUTION

2024
Prosiding seminar internasional

Design of location monitoring system on Lintas USU Bus

M. Aqmal Harist , TIGOR HAMONANGAN NASUTION

2022
Prosiding seminar internasional

Design of Automatic Doors for Ultraviolet Sterile Box

FAHMI , TIGOR HAMONANGAN NASUTION

2022
Prosiding seminar internasional

Application of work system engineering analysis

IKHSAN SIREGAR , TIGOR HAMONANGAN NASUTION

2022
Jurnal internasional bereputasi

An Extreme Learning Machine Based Adaptive VISMA for Stability Enhancement of Renewable Rich Power Systems

TIGOR HAMONANGAN NASUTION

2022
Jurnal internasional bereputasi

Coordinated Design of DIPSS and CES Using MDEA for Stability Enhancement: Jawa-Bali Indonesian Power Grid Study Case

TIGOR HAMONANGAN NASUTION

2021
Prosiding seminar internasional

Advanced Coordination of VIC, LFC, and AVR for Stability Enhancement on Renewable Rich Power System

TIGOR HAMONANGAN NASUTION

2021
Jurnal internasional bereputasi

Influence of Adding BESS as Ancillary Controller of Wind Power Plant on Low Frequency Oscillation

TIGOR HAMONANGAN NASUTION

2019
Prosiding seminar internasional

Monitoring temperature and humidity of server room using Lattepanda and ThingSpeak

SENIMAN , MUHAMMAD ANGGIA MUCHTAR , TIGOR HAMONANGAN NASUTION , IKHSAN SIREGAR

2019
Prosiding seminar internasional

Identification of Intervention Program Effectiveness at Work Accident revention

IKHSAN SIREGAR , TIGOR HAMONANGAN NASUTION

2018
Prosiding seminar internasional

High Voltage Distribution System (HVDS) as a better system compared to Low Voltage Distribution System (LVDS) applied at Medan city power network

RISWAN DINZI , FAHMI , TIGOR HAMONANGAN NASUTION

2018
Prosiding seminar internasional

Identification of Bahasa Indonesia official computer terms in Indonesian government websites

TIGOR HAMONANGAN NASUTION , MAYA SILVI LYDIA , AMALIA , DANI GUNAWAN

2017
Jurnal internasional bereputasi

Smart cloud system with image processing server in diagnosing brain diseases dedicated for hospitals with limited resources

TIGOR HAMONANGAN NASUTION , FAHMI

2017
Prosiding seminar internasional

Optimization backpropagation algorithm based on Nguyen-Widrom adaptive weight and adaptive learning rate

IKHSAN SIREGAR , ULFI ANDAYANI , ERNA BUDHIARTI NABABAN , BAIHAQI SIREGAR , MUHAMMAD ANGGIA MUCHTAR , TIGOR HAMONANGAN NASUTION

2017
Prosiding seminar internasional

Sequential - Storage of differences approach in medical image data compression for brain image datas

TIGOR HAMONANGAN NASUTION , FAHMI

2016
Prosiding seminar internasional

Comparative Analysis Of College Students In View Of Gender Issues

IKHSAN SIREGAR , MUHAMMAD ARIFIN NASUTION , ABDILLAH ARIF NASUTION , MUHAMMAD ANGGIA MUCHTAR , TIGOR HAMONANGAN NASUTION

2026
Jurnal internasional bereputasi

Intelligent SMES based on Flower Pollination Algorithm on Wind Power System for Dynamic Stability Enhancement

TIGOR HAMONANGAN NASUTION

Researches

2026

Pengembangan Modul Praktikum Sistem Digital Berbasis Mikrokontroler Arduino Sebagai Media Pembelajaran Interaktif

SENIMAN , TIGOR HAMONANGAN NASUTION , FAHMI

2025

Pengembangan Sistem Electronic Nose Berbasis Kecerdasan Buatan Untuk Prediksi Aroma dan Kualitas Kopi Indonesia

ARIF RIDHO LUBIS , TIGOR HAMONANGAN NASUTION , Yoga Pratama

2025

Pengenalan Jenis Roasting Biji Kopi Menggunakan Algoritma K-Nearest Neighbors (KNN)

TIGOR HAMONANGAN NASUTION , LUKMAN ADLIN HARAHAP , ULFI ANDAYANI

2023

Perancangan Sistem Bike Fitting Berbasis Pengenalan Pola pada Citra

SENIMAN , TIGOR HAMONANGAN NASUTION

2023
Penelitian Fundamental

Implementasi Machine Learning Pada Robot di Kompetisi KRSRI

SENIMAN , TIGOR HAMONANGAN NASUTION

2022

Desain Kotak Sterilisasi Otomatis dengan Teknologi Sinar Ultra Violet

FAHMI , TIGOR HAMONANGAN NASUTION

2021
Penelitian Fundamental

Perancangan Sistem Pemantauan Ruangan Portable Berbasis IoT

TIGOR HAMONANGAN NASUTION , AINUL HIZRIADI , FITRA NURMAYADI

2020
Penelitian Fundamental

Perancangan Sistem Pemantauan Ruangan Portable Berbasis IoT

TIGOR HAMONANGAN NASUTION , AINUL HIZRIADI , FITRA NURMAYADI

2019
Penelitian Dosen Pemula

SISTEM PEMANTAUAN KUALITAS UDARA BERBASIS INTERNET OF THINGS (IoT) PADA KAMPUS UNIVERSITAS SUMATERA UTARA

TIGOR HAMONANGAN NASUTION , MUHAMMAD ANGGIA MUCHTAR

2019
Penelitian Unggulan Perguruan Tinggi

SISTEM CERDAS PEMANTAUAN LINGKUNGAN SECARA REAL TIME DENGAN PENGOPTIMALAN ADVANCE MACHINE LEARNING

SARAH PURNAMAWATI , TIGOR HAMONANGAN NASUTION , ROMI FADILLAH RAHMAT , REZA TAQYUDDIN

2018
Penelitian Dosen Pemula

SISTEM PEMANTAUAN RUANG SERVER BERBASIS MOBILE

TIGOR HAMONANGAN NASUTION , MUHAMMAD ANGGIA MUCHTAR

2018
Penelitian Dosen Pemula

IDENTIFIKASI PENYAKIT TUBERKULOSIS BERDASARKAN CITRA X-RAY MENGGUNAKAN PROBABILISTIC NEURAL NETWORK (PNN)

TIGOR HAMONANGAN NASUTION , ULFI ANDAYANI , MUHAMMAD ANGGIA MUCHTAR

2018

Penelitian Unggulan Perguruan Tinggi

SISTEM CERDAS PEMANTAUAN LINGKUNGAN SECARA REAL TIME DENGAN PENGOPTIMALAN ADVANCE MACHINE LEARNING

SARAH PURNAMAWATI , TIGOR HAMONANGAN NASUTION , ROMI FADILLAH RAHMAT , REZA TAQYUDDIN

2016

Ipteks Bagi Masyarakat

Pemanfaatan Algoritma Grey Level Co-Ocurrance Matrix Dan Jaringan Saraf Tiruan Backpropagation Untuk Klasifikasi Tingkatan Roasting Kopi Spesialti Pada Aplikasi Android

TIGOR HAMONANGAN NASUTION , ULFI ANDAYANI