Dr. Amalia, S.T., M.T.

Lecturer for Faculty of Computer Science and Information Technology

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Mrs. Amalia was born in Banda Aceh on December 21, 1978. She has a bachelor degree in Electrical Engineering from Universitas Syiah Kuala. She then continued her postgraduate education in the Department of Electrical Engineering at Universitas Sumatera Utara and She completed his last education at the S3 level, Computer Science study program, at Universitas Sumatera Utara in 2022.

Mrs. Amalia served as Head of the Multimedia Laboratory at Fakultas Ilmu Komputer dan Teknologi Informasi Universitas Sumatera Utara for the period of 2017 - 2021. She already has the position of Assistant Professor, and currently serves as Head of the Computer Science Study Program at Fakultas Ilmu Komputer dan Teknologi Informasi Universitas Sumatera Utara.

Mrs. Amalia's field of research is Natural Language Processing, some of her works in this research field have been published in reputable journals both nationally and internationally.

Never stop learning because life never stops teaching is the life motto that Amalia always holds.

Publications

2026
Jurnal internasional bereputasi

Domain-Aware Spatial-Temporal Selective Gated LSTM for Real-Time Driver Drowsiness Detection

ADE CANDRA , AMALIA , POLTAK SIHOMBING

2026
Jurnal internasional bereputasi

Sentiment and Emotion Analysis in Textual Data: A Recent Systematic Literature Review Method, Model and Application

AMALIA , Rabiah Abdul Kadir , Ang Mei Choo , Wan Azzura Wan Ramli

2026
Book chapter internasional

Advances in Visual Informatics

AMALIA , Wan Azzura Wan Ramli , Rabiah Abdul Kadir

2026
Jurnal internasional bereputasi

Domain-Aware Spatial-Temporal Selective Gated LSTM for Real-Time Driver Drowsiness Detection

AMALIA , POLTAK SIHOMBING , ADE CANDRA , Novriadi Antonius Siagian

2025
Prosiding seminar internasional

Analysis of Visual Sequences for Driver Drowsiness Detection

NOVRIADI ANTONIUS SIAGIAN , POLTAK SIHOMBING , ADE CANDRA , AMALIA

2025
Jurnal internasional bereputasi

A Progressive Hedging–Based Two-Stage Stochastic Programming Model for Managing Seasonal Demand and Lead-Time Uncertainty in Patchwork MSMEs

AMALIA , AFNARIA , ARIFA PRATAMI

2025
Jurnal nasional terakreditasi

Segmentasi Nasabah Bank Pada Data Campuran Menggunakan K-Means

Clustering

MOHAMMAD ANDRI BUDIMAN , AMALIA , JOCELINE SCHELLENBERG W, S.KOM

2025
Jurnal internasional bereputasi

Sound Changes in the Haloban Language of the Banyak Islands, Aceh, Indonesia

TASNIM LUBIS , DWI WIDAYATI , AMALIA , LIESNA ANDRIANY , MUKRAMAH

2025
Prosiding seminar internasional

Feature Selection Using Ensemble Lasso Regression, Random Forest and Recursive Feature Elimination Methods in Breast Cancer Classification

AMALIA , SUTARMAN , Wilda Royhan

2025
Jurnal internasional bereputasi

Implementation of Tracking System Based on JT701 Smart Lock Technology on Goods Delivery Service Vehicles

FEBRIN AULIA BATUBARA , BAKTI VIYATA SUNDAWA , AMALIA , MORLAN PARDEDE , TUTI ADI TAMA NASUTION

2024
Prosiding seminar internasional

A Transformer-Based Approach with OpenNMT for Indonesian to Gayo Language Translation

AMALIA , MOHAMMAD ANDRI BUDIMAN

2024
Prosiding seminar internasional

Sentiment Analysis Multi-Label of Toxic Comments using BERT-BiLSTM Methods

AMALIA , TAUFIK FUADI ABIDIN , SYARIFAH KEMALA PUTRI

2024
Prosiding seminar internasional

Sentiment Analysis Multi-Label of Toxic Comments using BERT-BiLSTM Methods

AMALIA , TAUFIK FUADI ABIDIN , SYARIFAH KEMALA PUTRI

2024
Prosiding seminar internasional

The Role of Data Visualization in Improving the Sustainability of Smallholdings

AMALIA , ADE CANDRA , AHMAD RASYID MAULANA

2024
Jurnal nasional

Implementasi Sistem Informasi Pengelolaan Aset Desa Berbasis Web pada Desa Tingkeum, Kabupaten Aceh Besar

YUNIDAR , AMALIA , MUHAMMAD IRHAMSYAH

2024
Prosiding seminar internasional

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

AMALIA , MAYA SILVI LYDIA

2024
Prosiding seminar internasional

Sorting of Hazardous and Toxic Solid Waste (B3) Using Ensemble Learning Techniques with VGG-16 and DenseNet-121 Architecture

AMALIA , SUTARMAN , REZA MUSTHOFA MUFTHI

2024
Prosiding seminar internasional

Sentiment Analysis Using K-NN Algorithm Through Random Search Cross

Validation Approach

AMALIA , OPIM SALIM SITOMPUL , TITO AFWI SENDA

2024
Prosiding seminar internasional

Sentiment Analysis Using K-NN Algorithm Through Random Search Cross Validation Approach

TITO AFWI SENDA , AMALIA , OPIM SALIM SITOMPUL

2024
Prosiding seminar internasional

Conservation of the Alaban tree (Vitex pinnata L) in the coastal landscapes at Banyak Island, Aceh Province

ABIYULAIL ALATAS ABUS , Achdial Farhan Abus , AMALIA , ROBERT SIBARANI , TASNIM LUBIS , JUNAIDI

2024
Prosiding seminar internasional

Performance Analysis of KNN and C.45 Algorithms With Kappa Measure Evaluation

DINA MARIANA SIBORO , AMALIA , Suyanto

2024
Prosiding seminar internasional

Implementation of Sustainable Development Goals through Literaku Application Based on Google Cloud APIs to Improve Literacy for Blind People

FARHAN DOLI FADHIIL SIAGIAN , MUHAMMAD GHOZALI , AMALIA

2024
Prosiding seminar internasional

Implementation of Sustainable Development Goals through Literaku Application Based on Google Cloud APIs to Improve Literacy for Blind People

AMALIA , FARHAN DOLI FADHIIL SIAGIAN

2024
Prosiding seminar internasional

Implementation of Sustainable Development Goals through Literaku Application Based on Google Cloud APIs to Improve Literacy for Blind People

AMALIA , FARHAN DOLI FADHIIL SIAGIAN , MUHAMMAD GHOZALI , Khairul Imam , Fitri Aulia Fadillah Nasution , Eric Martin

2023
Prosiding seminar internasional

Impact of Image Enhancement for Osteoporosis Detection Based on Deep Learning Algorithm

KAHLIL , ROSLIDAR , AMALIA , ALFATIRTA MUFTI

2022
Jurnal nasional

PEMBENTUKAN KOMITE SEKOLAH DI KB TANAH MERAH KECAMATAN GALANG MELALUI PENDEKATAN ANTROPOLINGUISTIK

AMALIA , TASNIM LUBIS

2022
Prosiding seminar internasional

Shaping ethnobotanical tourism on the coastal landscape through Halobanese oral traditions at Banyak Island

AMALIA , TASNIM LUBIS , LIESNA ANDRIANY , DELIMA , Achdial Farhan Abus

2021
Prosiding seminar internasional

Multilabeling Indonesian Toxic Comments Classification Using the Bidirectional Encoder Representations of Transformers Model

AMALIA , DANI GUNAWAN

2021
Prosiding seminar internasional

A relevant document search system model using word2vec approaches

MOHAMMAD ANDRI BUDIMAN , AMALIA

2021
Prosiding seminar internasional
Sentiment analysis of GO-JEK services quality using Multi-Label Classification
AMALIA , DANI GUNAWAN , KHAIRUDDIN NASUTION

2020
Jurnal internasional bereputasi
File cryptocompression by using H-rabin and golomb rice algorithm
AMALIA

2019
Jurnal internasional
Predictions of World Population Life Expectancy Using Cyclical Order Weight / Bias
AMALIA

2019
Jurnal internasional
North Sumatera tourism spots searching system based on semantic web
AMALIA

2019
Jurnal internasional
Building the Application to Identify Incorrect Capital Letters Writing in Bahasa Indonesia
AMALIA , DANI GUNAWAN

2019
Prosiding seminar internasional
Automated Bahasa Indonesia essay evaluation with latent semantic analysis
INDRA AULIA , AMALIA , DANI GUNAWAN

2019
Poster seminar internasional
The Identification of Negative Content in Websites by Using Machine Learning Approaches
AMALIA

2018
Prosiding seminar internasional
Review of the recent research on automatic text summarization in Bahasa Indonesia
AMALIA

2018
Prosiding seminar internasional
Meme opinion categorization by using optical character recognition (OCR) and naÃƒfÂ¨ve bayes algorithm
AMALIA

2018
Jurnal nasional
Perbandingan Metode Klaster dan Preprocessing Untuk Dokumen Berbahasa Indonesia
AMALIA

2018
Prosiding seminar internasional
Resource Description Framework Generation for Tropical Disease Using Web Scraping
AMALIA

2018
Jurnal internasional
File text security using Hybrid Cryptosystem with Playfair Cipher Algorithm

and Knapsack Naccache-Stern Algorithm

AMALIA

2018
Jurnal internasional

Building automatic customer complaints filtering application based on Twitter in Bahasa Indonesia

AMALIA

2018
Jurnal internasional

An Implementation of RC4⁺ Algorithm and Zig-zag Algorithm in a Super Encryption Scheme for Text Security

AMALIA

2018
Jurnal internasional

Determination of quality television programmes based on sentiment analysis on Twitter

AMALIA

2018
Jurnal internasional

Implementation of Canny and Isotropic Operator with Power Law Transformation to Identify Cervical Cancer

AMALIA

2018
Jurnal internasional

Combination of Rivest-Shamir-Adleman Algorithm and End of File Method for Data Security

AMALIA

2018
Jurnal internasional

The Observation of Bahasa Indonesia Official Computer Terms Implementation in Scientific Publication

AMALIA

2018
Jurnal internasional bereputasi

Identifying strengths and weaknesses of Quality Management Unit University of Sumatera Utara software using SCAMPI C

AMALIA

2018
Prosiding seminar internasional

Clustering articles in bahasa Indonesia using self-organizing map

AMALIA , DANI GUNAWAN

2017
Prosiding seminar internasional

Clustering Articles in Bahasa Indonesia Using Self-Organizing Map 2017 Int

AMALIA

2017
Jurnal nasional

Improving data collection on article clustering by using distributed focused crawler

AMALIA

2017
Prosiding seminar internasional

Document clustering optimization with synonym dictionary check function

AMALIA

2017
Prosiding seminar internasional

Identification of Bahasa Indonesia official computer terms in Indonesian government websites

AMALIA

2017
Prosiding seminar internasional

Focused crawler for the acquisition of health articles

DANI GUNAWAN , AMALIA , FATHIA MEIRINA

2017
Prosiding seminar internasional

The Implementation of open data in Indonesia

AMALIA

2017
Prosiding seminar internasional

Automatic extraction of multiword expression candidates for Indonesian language

AMALIA

2017
Jurnal internasional

Combination of Huffman Coding Compression Algorithm and Least Significant Bit Method for Image Hiding

AMALIA

2017
Jurnal internasional

Russian Character Recognition using Self-Organizing Map

AMALIA

2017
Jurnal internasional

The design of lexical database for Indonesian language

AMALIA

2017
Jurnal internasional

The usage evaluation of official computer terms in Bahasa Indonesia in Indonesian government official websites

AMALIA

2013
Prosiding seminar internasional

Performance Evaluation of Free Anti Plagiarism Software

AMALIA

2012
Jurnal nasional

Optimasi Pemberian ASI Eksklusif Ibu Bekerja kepada Bayinya di Kota Medan.

AMALIA

2026
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

AMALIA

2026
Jurnal nasional

PEMBENTUKAN KOMITE SEKOLAH DI KB TANAH MERAH KECAMATAN GALANG MELALUI PENDEKATAN ANTROPOLINGUISTIK

AMALIA

2026
Tulisan ilmiah

Sistem Terdistribusi Pencarian Kerja dan Tenaga Kerja dalam Sektor Informal Memanfatkan Teknologi Ponsel

AMALIA

2026
Prosiding seminar nasional

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

AMALIA

Researches

2026
Penelitian Fundamental

Optimasi Produksi UMKM Berbasis Kain Perca dengan Two-Stage Stochastic Programming dan AI-Powered Demand Forecasting

AFNARIA , AMALIA , ARIFA PRATAMI , YUNDARI ARIMBI , ARBA ATIKAH

2025
Penelitian Fundamental

Optimasi Produksi UMKM Berbasis Kain Perca dengan Two-Stage Stochastic Programming dan AI-Powered Demand Forecasting

AFNARIA , AMALIA , ARIFA PRATAMI , YUNDARI ARIMBI , ARBA ATIKAH

2024
Ipteks Bagi Masyarakat

Penelitian Thesis Performance Analysis of KNN and C. 45 Algorithms With Kappa Measure Evaluation

SUYATNO , AMALIA , DINA MARIANA SIBORO

2023

INVENTARISASI ETNOBOTANI SEBAGAI KEARIFAN LOKAL MASYARAKAT HALOBAN DI PULAU BANYAK BARAT: PENDEKATAN ANTROPOLINGUISTIK

ROBERT SIBARANI , TASNIM LUBIS , JUNAIDI , AMALIA

2022
Kerjasama Luar Negeri dan Publikasi Internasional

BAHASA HALOBAN DI PULAU BANYAK: DOKUMENTASI NARASI TRADISIONA

TASNIM LUBIS , AMALIA , DARDANILA , NURUL ADILLA ALATAS ABUS , ABIYULAIL ALATAS ABUS

2021
Penelitian Dana Lokal Perguruan Tinggi

Pendekatan Deep Learning pada Identifikasi Part of Speech Kata dalam Bahasa Indonesia

AMALIA , DANI GUNAWAN , ABIYU DZAKWAN KHAIRI , NIKITA ANANDA PUTRI MASALING

2018
Penelitian Dana Lokal Perguruan Tinggi

Kakas Bantu NLP untuk Teks Bahasa Indonesia

AMALIA , DANI GUNAWAN , TEGUH SUBIYANTORO

Community Services

2026

IEEE Indonesia Humanitarian Program - Disaster Response Aceh and North Sumatra, Indonesia

ADE CANDRA , MAULIANA , TITO AFWI SENDA , MUHAMMAD ATQA ADZKIA ZALDI , AMALIA

2022
Ipteks Bagi Masyarakat

PEMBENTUKAN KOMITE SEKOLAH DI KELOMPOK BERMAIN (KB) TANAH MERAH KECAMATAN GALANG MELALUI PENDEKATAN ANTROPOLINGUISTIK

TASNIM LUBIS , FAHMI , AMALIA

2021
Penelitian Dana Lokal Perguruan Tinggi

MEMANFAATKAN BAHASA DI RUANG PUBLIK DALAM MEMPROMOSIKAN QUEEN BURGER AND SNACK KOTA MEDAN: PENDEKATAN ANTROPOLINGUISTIK

TASNIM LUBIS , EDDY SETIA , AMALIA

2013
Ipteks Bagi Masyarakat

IbM Kader Posyandu Di Kecamatan Medan Amplas Kota Medan

2013
Penelitian Dosen Pemula

Penyebaran Informasi Dan Motivasi Pemberian ASI Eksklusif Kepada Para Ibu Menyu

Intellectual Property Rights

2022
Hak cipta nasional

APLIKASI ASISTEN PENDIDIKAN LITERASI SECARA INKLUSIF BAGI TUNANETRA BERBASIS NATURAL LANGUAGE PROCESSING (NLP) BAHASA INDONESIA

AMALIA

2019
Hak cipta nasional

Kakas Batu NLTK Untuk Bahasa Indonesia

DANI GUNAWAN , AMALIA

2026
Hasil penelitian/pemikiran yang tidak dipublikasikan

Subword Embedding dengan Pendekatan Byte Pair Encoding dan Morfologi Bahasa Indonesia

AMALIA