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Bu Uun; that's what Mrs. Hayatunnufus is usually called. She was born in Koto Majidin Mudik on July 19, 1992. Mrs. Uun graduated from the Computer Science Undergraduate Program of Universitas Sumatera Utara (USU) and the Computer Science Master Program of Universitas Gadjah Mada (UGM). During her studies, she always received PPA scholarships during her undergraduate education and excellent scholarships from the Ministry of Education and Culture while pursuing her master's degree.

Mrs. Uun has been a teacher since college, first as a lecturer assistant and lab assistant. Her teaching duties continued at SMK Islam Teknologi Marinah Al-Hidayah Medan, where she taught Photography, Graphic Design, and Software Engineering. Now, she is a lecturer at the Computer Science Undergraduate Study Program, Fasilkom-TI USU, and she has been trusted several times as an instructor for the Digital Talent Scholarship (DTS) of USU.

The organizations that Mrs. Uun has participated in are IMILKOM USU (as secretary for the student affairs area), PEMA Fasilkom-TI (as a member of the public relations area), IKLC USU (as a member of the scientific development team), UKMI Al-Khuwarizmi Fasilkom-TI (as a member), Science and Technology Forum UGM (as a research member), HIMPASIKOM UGM (as general treasurer), Postgraduate Student Association UGM (as a member of the research and technology team), Paradigm Journal UGM (as field secretary), Research Lab SKJ UGM (as a member), G-Connect UGM (as a part of landslide disaster mitigation data team), and the Indonesian Cancer Foundation in North Sumatra (as head of IT).

Currently, Mrs. Uun is actively participating as a staff of the Institute for Curriculum and Learning Innovation (LINK-UP USU), as a member of the Indonesia Collaboration Research - UGM Jogja Tanggap Covid, as a member of the Covid-19 information system development team UGM, and as a North Sumatra ICT volunteer. Meanwhile, her research areas of interest are IoT, AIoT, and data science. She has attended several training sessions on topics related to this field. She adheres to the principle of "Be Nice, Be Genuine".

Publications

2024

Prosiding seminar internasional

COMPARISON OF CURE ALGORITHMS BEFORE AND AFTER ATTRIBUTE DELETION USING FORWARD SELECTION METHOD

MUHAMMAD ANGGIA MUCHTAR , HAYATUNNUFUS , UMaya RAMADHANI PUTRI NASUTION , FANINDIA PURNAMASARI

2020

Jurnal nasional

Sistem Cerdas Pemberi Pakan Ikan Secara Otomatis

HAYATUNNUFUS , DEBBY ALITA

2024

Prosiding seminar internasional

Implementation Of Rabbit Urine Ammonia Level Detection System with Internet of Things

GALIH ARI WIRAWAN SIREGAR , HAYATUNNUFUS , LUKMAN ADLIN HARAHAP , DHEA SOFINA , RIZKA RAMADHANI

2025

Jurnal nasional terakreditasi

Digitalization of rabbit farming in Medan City, Indonesia

MUHAMMAD KHALIQI , RULIANDA PURNOMO WIBOWO , HAYATUNNUFUS , HERFITA RIZKI HASANAH GURNING , GALIH ARI WIRAWAN SIREGAR

2024

Prosiding seminar internasional

Procedural Maze Modeling in 3D For Game Asset

JOS TIMANTA TARIGAN , HAYATUNNUFUS

2024

Prosiding seminar internasional

Automatic Control System For Rabbit Cage Ammonia Levels Based AIoT

HARRY ISWANTO SIMANJUNTAK , HAYATUNNUFUS , POLTAK SIHOMBING

2024

Prosiding seminar internasional

Comparison Analysis of Johnson's Algorithm and A-Star Iterative Deepening Algorithm in Determining The Nearest Vaccination Location Route

HAYATUNNUFUS , ALTAHA , T.HENNY FEBRIANA HARUMY

2024

Prosiding seminar internasional

Procedural Maze Modeling in 3D For Game Asset

HAYATUNNUFUS

2023

Jurnal internasional bereputasi

Algorithm Forward Chaining And Backward Chaining For Diagnosing Diabetes Mellitus

HANDRIZAL , HAYATUNNUFUS

2024

Prosiding seminar internasional

Dust Particle Matter (2.5) with Meteorological Parameters to Predict Air Quality Based on Support Vector Machine Approaches

HAYATUNNUFUS , FAHRURROZI LUBIS , ROMI FADILLAH RAHMAT , AINUL HIZRIADI , HERRIYANCE

2026

Jurnal nasional

Sistem Kendali Otomatis Pada Akuaponik Berbasis Mikrokontroler Arduino UNO R3

HAYATUNNUFUS

2021

Jurnal nasional

SISTEM INFORMASI GEOGRAFIS PELAYANAN KESEHATAN BERBASIS ANDROID PADA KABUPATEN WAY KANAN

HAYATUNNUFUS , DEBBY ALITA

2026

Prosiding seminar internasional

A Comparative Approach Using Linear Regression and Random Forest for Modeling Food Crop Production Based on Harvest Area in Kalimantan

HAYATUNNUFUS , POLTAK SIHOMBING , SALSABILA BALQIS

2025

Prosiding seminar internasional

Deep Learning Based Satellite Image Segmentation Analyzes for Coastal Flood Disaster

HAYATUNNUFUS , BEJO SLAMET , IVAN JAYA , ADE CANDRA

2024

Prosiding seminar internasional

Customer Clusterization using Machine Learning Approach

FANINDIA PURNAMASARI , UMayA RAMADHANI PUTRI NASUTION , MARISCHA ELVENY , HAYATUNNUFUS

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

2026

Prosiding seminar internasional

Classification of Aedes Mosquito Larvae Using Hybrid Convolutional Neural Network and Long Short-Term Memory

HAYATUNNUFUS , SYAHRIL EFENDI , MAYA SILVI LYDIA , MOHAMMAD ANDRI BUDIMAN , DHANI SYAHPUTRA BUKIT , ARYA DWIHARSYA , Riza Sulaiman , Ledy Afrida Sinaga , PAUZI IBRAHIM NAINGGOLAN

2020

Jurnal nasional

APLIKASI PEMETAAN LOKASI PELAYANAN KESEHATAN DI KABUPATEN WAY KANAN

HAYATUNNUFUS

2025

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Deep Learning Based Satellite Image Segmentation Analyzes for Coastal Flood Disaster

HAYATUNNUFUS , ADE CANDRA , BEJO SLAMET , IVAN JAYA

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Jurnal nasional terakreditasi

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

SRI MELVANI HARDI , FRISKA PEGRISSENTIA BR SIRAIT , HAYATUNNUFUS

2024

Prosiding seminar nasional

Pembuatan Pakan Konsentrat Berbasis Maggot Black Soldier Fly (BSF) Pada Pakan Ternak Kelinci Dengan Konsep Zero Waste

MUHAMMAD KHALIQI , GALIH ARI WIRAWAN SIREGAR , HAYATUNNUFUS , ADE TRISNA , ELY HAYATI NASUTION , VIVI ADRYANI NASUTION , R. EDHY MIRWANDHONO , M. HADYAN YUNHAS PURBA , SURI MUTIA SIREGAR

2024

Prosiding seminar internasional

Detection of Rob Flood Affected Areas in Belawan with Medium Resolution Imagery Using Deep Learning

ADE CANDRA , ACHMAD SIDDIK THOHA , VINCENT CHANDRA JUNIOR , MUHAMMAD SADDAM ZIKRI DALIMUNTHE , SYAFITRI ARIYA , WILSON , HAYATUNNUFUS

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Comparison analysis of Johnson's algorithm and a-star iterative deepening algorithm in determining the nearest vaccination location route

HAYATUNNUFUS

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A Combined Discrete Cosine Transform Algorithm and Downsampling Techniques for Data Compression and Transformation on IoT Sensors

HAYATUNNUFUS , PAUZI IBRAHIM NAINGGOLAN , ERNA BUDHIARTI NABABAN , ANDIKO EKARINA PINDONTA BANGUN

2025

Jurnal internasional bereputasi

Improving Road Safety in Indonesia: A Clustering Analysis of Traffic Accidents Using K-Medoids

HANDRIZAL , HAYATUNNUFUS

2024

Jurnal internasional bereputasi

The Impact of Artificial Intelligence Chatbot Implementation on Customer Satisfaction in Padangsidempuan: Study with Structural Equation Modelling Approach

AMI DILHAM , ANDREW SATRIA LUBIS , HAYATUNNUFUS , Jonathan Liviera Marpaung , Diapari Lubis , FIVI RAHMATUS SOFIYAH

2023

Jurnal nasional terakreditasi

Prediction of Dengue Fever in Coastal Areas of North Sumatera (Kuala Namu and Belawan) With Random Forest and Support Vector Machine (SVM) Methods

HAYATUNNUFUS , T.HENNY FEBRIANA HARUMY , SUZI SURBAKTI

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Jurnal nasional terakreditasi

Enhancing Single Nucleotide Polymorphisms Detection from Imbalanced Data: A Study of Resampling Techniques in Machine Learning Algorithms

HAYATUNNUFUS , ROSSY NURHASANAH , DEDY ARISANDI , FANINDIA PURNAMASARI

2026

Jurnal nasional

Integrated Post-Flood Community Service through Health, Environmental, and Filtration Interventions in Deli Serdang

BOBY CAHYADY , MUHAMMAD TAUFIK , HAYATUNNUFUS

Researches

2023

Ipteks Bagi Wilayah

PENGEMBANGAN JARINGAN KLUSTER TERINTEGRASI BANJIR ROB DI BELAWAN BERBASIS DEEP LEARNING

ADE CANDRA , BEJO SLAMET , HAYATUNNUFUS , IVAN JAYA , SAMUEL REJEKINTA GINTING , ANDIKO EKARINA PINDONTA BANGUN , WILSON

2022

Penelitian Dana Lokal Perguruan Tinggi

Model Pendeteksi Single Nucleotide Polymorphism Pada Genom Kedelai Menggunakan Kombinasi Machine Learning dan Resampling

DEDY ARISANDI , HAYATUNNUFUS , ROSSY NURHASANAH , FANINDIA PURNAMASARI

2025

Penerapan Large Language Model pada Pergerakan Robot Berkaki

BAIHAQI SIREGAR , HAYATUNNUFUS

2024

SMART GOVERNANCE: EFEKTIVITAS INTEGRASI CHATBOT ARTIFICIAL INTELEGENCE UNTUK PENINGKATAN PELAYANAN DI PEMERINTAHAN BADAN PERENCANAAN, PENELITIAN DAN PENGEMBANGAN DAERAH KOTA PADANGSIDIMPUAN

ANDREW SATRIA LUBIS , FIVI RAHMATUS SOFIYAH , HAYATUNNUFUS , AMI DILHAM

2025

Apinbot sebagai Mediator Digital: Integrasi Kecerdasan Buatan Generatif untuk Otomatisasi Birokrasi Perguruan Tinggi di Indonesia

ANDREW SATRIA LUBIS , MUHAMMAD ARIF LUBIS , FIVI RAHMATUS SOFIYAH , HAYATUNNUFUS , AMI DILHAM

2023

Penelitian Fundamental

PENERAPAN SISTEM PENDETEKSI KADAR AMONIA URIN KELINCI DENGAN TEKNOLOGI INTERNET OF THINGS

GALIH ARI WIRAWAN SIREGAR , LUKMAN ADLIN HARAHAP , HAYATUNNUFUS , ALWI SIDDIQ , ANNISA LUBIS , ANISA ZUHRA

2023

Kerjasama Luar Negeri dan Publikasi Internasional

NATURAL LANGUAGE GENERATION FOR SMART VIRTUAL TOURISM OF BATAK HERITAGE AT LAKE TOBA

HAYATUNNUFUS , OPIM SALIM SITOMPUL , INDRA AULIA , FANINDIA PURNAMASARI , ERNA BUDHIARTI NABABAN

2024

Prediction of Agricultural Yields through Deep Learning in Big Data Analytics for Food Security in North Sumatra

BAIHAQI SIREGAR , HAYATUNNUFUS , OPIM SALIM SITOMPUL , ERNA BUDHIARTI NABABAN , Ahmad Ashari

2022

Penelitian Dosen Pemula

DETEKSI AREA TERDAMPAK BANJIR ROB DI BELAWAN DENGAN CITRA RESOLUSI SEDANG MENGGUNAKAN DEEP LEARNING

ADE CANDRA , HAYATUNNUFUS , ACHMAD SIDDIK THOHA , VINCENT CHANDRA JUNIOR , SYAFITRI ARIYA , MUHAMMAD SADDAM ZIKRI DALIMUNTHE

Community Services

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Ipteks Bagi Masyarakat

Pengembangan College Readiness Programme untuk Meningkatkan Minat Melanjutkan Pendidikan Tinggi pada Siswa SMA Yayasan Pendidikan Mulia

SURI MUTIA SIREGAR , MUHAMMAD KHALIQUI , TARMIDI , HAYATUNNUFUS

2024

Ipteks Bagi Masyarakat

MEMPERCEPAT KEBANGKITAN LITERASI AL QUR'AN : MENYAMBUNGAN KISAH DAN AYAT DENGAN PENGALAMAN BELAJAR BERBASIS VIRTUAL REALITY (VR)

ADE CANDRA , ELY HAYATI NASUTION , HAYATUNNUFUS , ANDI PRATAMA LUBIS , MUHAMMAD RAJA INAL LUBIS , SOHMONO SODIP MANIK , ZIHAN SYAKILLA

2025

Ipteks Bagi Masyarakat

"THE ON LOOP RANGER" : PENGUATAN PELAYANAN MULTIDISIPLINER PERI-HOSPITAL DALAM PENANGGULANGAN BENCANA DI KABUPATEN TAPANULI TENGAH DAN KOTA SIBOLGA

ARLIZA JUAIRIANI LUBIS , DR SUNNA VYATRA HUTAGALUNG , ADE CANDRA , TITO AFWI SENDA , MEIDINA ZULFA HANIE , MUHAMMAD ATQA ADZKIA ZALDI , HAYATUNNUFUS , FANINDIA PURNAMASARI , ZULFENDRI , M. Ichwan , NENNI DWI APRIANTI LUBIS , ROBI ARIANTA SEMBIRING , MERINA PANGGABEAN , ROBERT ONG , PUTERA NAMI SHIDDIEQY , PERRY SAPUTRA HALIM , NAJWA AMANDA , STEVEN ANTHONY , ANNISA PUTRI APRILIA , ATIKAH SHABRINA SIREGAR , LAHAN JAYA HAREFA , FARREL NADJIB SINDHURYAN , MUHAMMAD RUHUL JADID , ADITYA ALAMSYAH ZICO , HOTMA ROSMAULI SARAGIH , WIRA PRAKASA , AYYESHA HERVI ANANDA , AHMAD RAIHAN ADILAH , MICHAEL HARTADI GINTING , FRANSISKANES MANURUNG , DEVI DEVINDA TANJUNG , REFLI TIARMA ARIANI PANGGABEAN , TEGUH SUBIYANTORO , ALISSYA HUMAIRAH MARTIASAPUTRI , MEGA SITI NURHALIZAH , HAFIZHA RAMADAYANTI

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Penelitian Dana Lokal Perguruan Tinggi

MEMPERCEPAT KEBANGKITAN LITERASI AL QUR'AN : MENYAMBUNGAN KISAH DAN AYAT DENGAN PENGALAMAN BELAJAR BERBASIS VIRTUAL REALITY (VR)

ADE CANDRA , ELY HAYATI NASUTION , HAYATUNNUFUS , ANDI PRATAMA LUBIS

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Pelatihan Digitalisasi Pemasaran dan Pembukuan Keuangan Peternak Kelinci di Kota Medan

GALIH ARI WIRAWAN SIREGAR , MUHAMMAD KHALIQUI , HAYATUNNUFUS , RULIANDA PURNOMO WIBOWO

2022

Ipteks Bagi Masyarakat

Pembuatan Pakan Konsentrat Berbasis Maggot Black Soldier Fly (BSF) pada Pakan Ternak Kelinci dengan Konsep Zero Waste dan Akselerasi Merdeka Belajar Kampus Merdeka

VIVI ADRYANI NASUTION , M. HADYAN YUNHAS PURBA , ELY HAYATI NASUTION , GALIH ARI WIRAWAN SIREGAR , ADE TRISNA , SURI MUTIA SIREGAR , MUHAMMAD KHALIQUI , HAYATUNNUFUS , R. EDHY MIRWANDHONO

2023

Teknologi Pengaduk Pakan Ternak Otomatis Berbasis Internet of Things pada Kelompok Tani Sido Selamat, Desa Tebing Linggahara, Kecamatan Bilah

Barat, Kabupaten Labuhanbatu

AZHARI , HAYATUNNUFUS , DELIMA LAILAN SARI NASUTION , ALDO ERSAN WAHYUDI

2025

Transformasi Pembelajaran Digital: Pelatihan Coding Interaktif Berbasis Scratch pada Mikrokontroler dan Penerapan Artificial Intelligence untuk Guru dan Siswa di SMP Negeri 14 Binjai

BAIHAQI SIREGAR , HAYATUNNUFUS , ULFI ANDAYANI

2024

Ipteks Bagi Masyarakat

Penerapan Pembelajaran Komprehensif dalam upaya Self Manajemen Pencegahan Diabetes Melitus pada Kader Kesehatan dan Keluarga di Desa Tadukan Raya Sinembah Tanjung Muda Hilir, Kabupaten Deli Serdang

LUFTHIANI , HAYATUNNUFUS , SITI ZAHARA NASUTION

Intellectual Property Rights

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Collage Readiness Programme

TARMIDI , MUHAMMAD KHALIQUI , SURI MUTIA SIREGAR , HAYATUNNUFUS

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Paten nasional

Pelet Kelinci Herbal Berbasis Daun Kelor (Moringa Oliefera) dan Daun Jambu Biji (Psidium Guajava) Sebagai Anti Diare

YUNILAS , GALIH ARI WIRAWAN SIREGAR , DOLI M JAFAR DALIMUNTHE , HENOKHI ZEGA , M IQBAL RANANTA , DEDE AGUS SYAHDAN SIRAIT , RIZKA RAMADHANI , DWI SURYANTO , HAYATUNNUFUS

2026

Paten nasional

PELET KELINCI BERBASIS BELATUNG (MAGGOT) LALAT TENTARA HITAM (Black Soldier Fly)

RIZKA RAMADHANI , MUHAMMAD KHALIQUI , M. HADYAN YUNHAS PURBA , RULIANDA PURNOMO WIBOWO , R. EDHY MIRWANDHONO , ELY HAYATI NASUTION , ADE TRISNA , VIVI ADRYANI NASUTION , HAYATUNNUFUS , GALIH ARI WIRAWAN SIREGAR

2026

Paten nasional

METODE PENDETEKSIAN GERAKAN ISYARAT TANGAN MENJADI TEKS BERBASIS VIDEO CALL SECARA REAL-TIME

HAYATUNNUFUS , TESSA AGITHA IRWANI BR BARUS , PUTRI ANDRIYANI , RANI WIDYA ASTUTI , ANGELA SIADARI , HELGA PRICILLA BR. PURBA

2026

Hak cipta nasional

PROGRAM KOMPUTER APLIKASI DETEKSI BANJIR ROB BERBASIS IoT DAN YOLOv8

HAYATUNNUFUS