# Vanny Khairunnisaa's PORTOFOLIO

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Statisticans

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### About me

An undergarduate student majoring Statistics at University of Indonesia, I have strong in data science, business, and economics. I'm well-known for my persistence and organizational skills. I work well both alone and in teams, often meeting deadlines and accomplishing objectives under duress. I am a quick learner who is passionate about taking on new challenges.



# Experience Journey



**PEMIRA MATEK 2022** 

**PEMIRA FMIPA 2022** 

**OIM MIPA 2022** 

**HMDM 2022** 

Majoring Statistic

Secretary

Rules & Verification Division Staff

Indonesian Debate Moderator

Relation Intern

**FORSIL 2023** 

Secretary

**Fact Checker UI** 

Edu & Literacy Staff

**PEMIRA FMIPA 2023** 

Vice Head of Rules & Verification Divison

**HMDM 2023** 

**Relation Division Staff** 

**Weekend Career Expo by UIWB** 

Mini Case Competition

**Pojok Statistik UI** 

Service & Consultation Agent

**Buka Donasi** 

Finance & Relation Intern

**MSS FEB UI** 

**Business Case** Competition

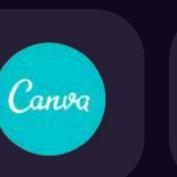
### Skills & Tools















R Studio

Jupyter & GoogleColab

SQL

Canva & Figma

Microsoft App

Data Visualization, Statistical Analytics, Econometrics, Multidimensional Scaling & Clustering, Pre-processing, GUI, Database Management, Quantitative Analysis, Sampling, Survey, and Forecasting

Photo & Video Editing, Vector Graphic Editing, and PowerPoint Design Excel, Word,
PowerPoint, and
Teams

# Work Experiences







#### Service and Consultation Department

Help UI Academicas explore data correctly and provide accurate information, as well as guidance on data literacy and the best methods to utilize.

25+ Consultation from April 2024

Contributing for 2 public infographics

#### Fundraising & Relationship Intern

Analyzing customer and company behavior Also in charge of coordinating web development and administrative functions.

Best Intern at October 2024

#### ANALYSIS OF FACTORS INFLUENCING POVERTY DEPTH (P1) IN INDONESIAN

	Model Tanpa Transformasi (Model 1)	Model Linier-Logaritma (Model 2)	Model Logaritma-Linier (Model 3)	Model Logaritma-Logaritma (Model 4)
R-squared	0.778	0.659	0.712	0.676
Adj. R-squared	0.696	0.533	0.605	0.556
Durbin-Watson:	1.783	1,328	1.805	1,531
Jarque-Bera (JB):	0.805	0.631	2.08	0.756
Skew	0.281	0.258	-0.524	0.32







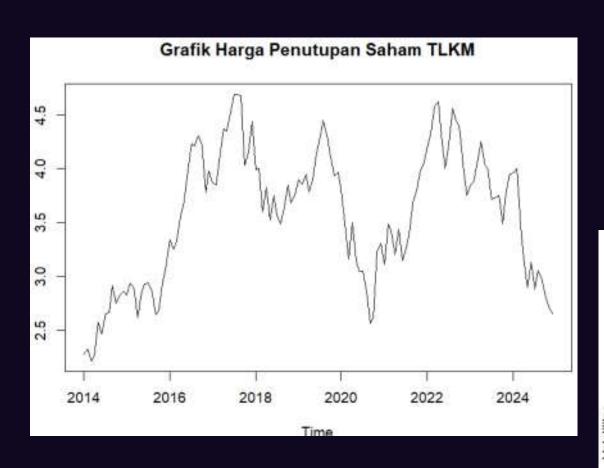
Poverty as an issue concern in Indonesia can be learned further by examining the Poverty Gap Index (P1). Using a log-linear model, the Poverty Gap Index is determined by the lowest level of education, work fraction of the population, and earnings. This study hopes to assist the government in increasing Indonesia's poverty, as one of the Sustainable Development Goals (SDGs).

Data Visualization, Quantitative Analysis, and Econometrics.

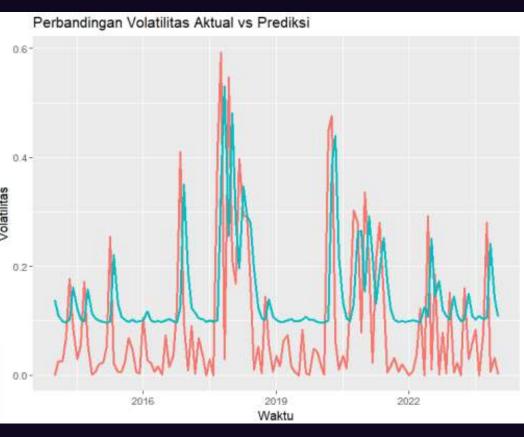
Click here for paper.

Click here for codes.

#### PREDICTION OF STOCK PRICE OF PT TELKOM INDONESIA







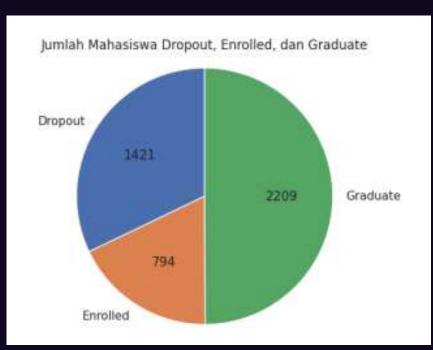
Using PT Telkom Indonesia (Persero) Tbk, this study proposes to estimate monthly stock prices using GARCH (1,1) models based on stock price volatility. Founded that the volatility of the stock price is sensitive to the shock that could happen by any incidence.

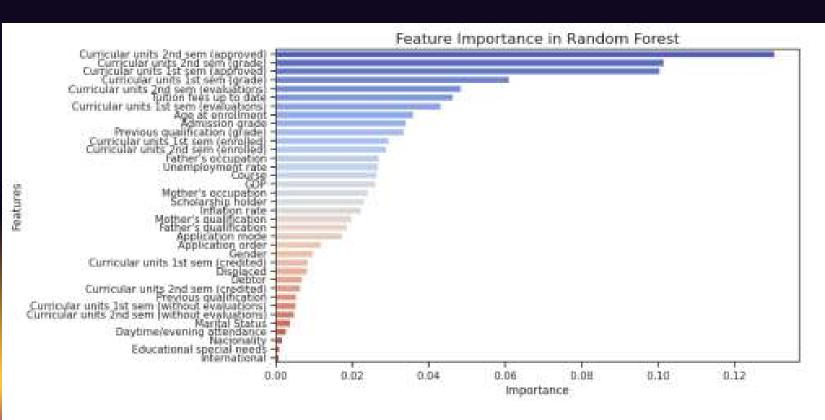
Quantitative Analysis, Econometrics, Time Series Analysis, Forecasting, and Residuals Analysis.

Click here for paper.

Click here for codes.

#### PREDICTION OF STUDENT ACADEMIC SUCCESS







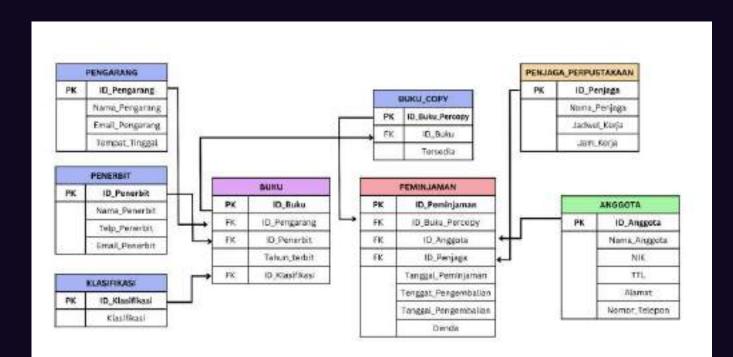


Academic success was a key measure of the university's and students' quality. Dropout rates appear to be a major issue across all academic sectors. This study uses Random Forest Analysis to analyze the aspects that may influence a student's decision to drop out, allowing the university to devise a wonderful solution to prevent a large number of dropouts.

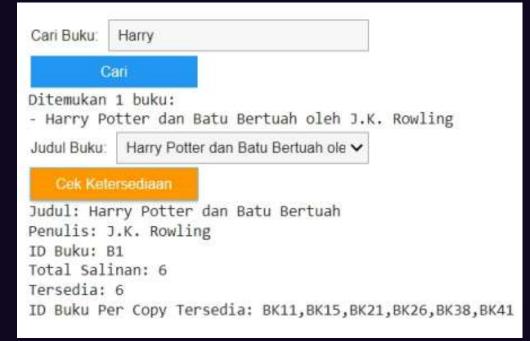
Quantitative & Qualitative Analysis, Clustering, Data Mining, and Random Forest Analysis.

To learn more, click here.

#### Library Database System



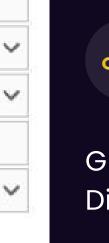
	ID_Buku	judul	pengarang	penerbit	Tahun_terbit	klasifikasi
0	B1	Harry Potter dan Batu Bertuah	IDP1	PEN1	2005	KLS1
1	B2	Rahasia Alam Semesta	IDP2	PEN2	2010	KLS2
2	В3	Tesis Mengenai Manajemen Pendidikan	IDP3	PEN3	2022	KLS3
3	В4	Makalah Keamanan Siber	IDP4	PEN4	2018	KLS4
4	B5	Kumpulan Pulsi Cinta	IDP5	PEN5	2014	KLS1
5	В6	Panduan Lengkap SEO	IDP6	PEN6	2019	KLS2
6	В7	Petualangan Sherina	IDP7	PEN7	2017	KLS1
7	B8	Jurnal Teknik Elektro Vol. 3	IDP8	PEN8	2020	KLS5
8	B9	Analisis Data Mining pada E-commerce	IDP9	PEN9	2021	KLS6
9	B10	Manajemen Pendidikan di Era Globalisasi	IDP3	PEN10	2022	KLS3



Judul:		
Pengarang:	IDP1	~
Penerbit:	PEN1	~
Tahun Terbit:	2023	
Klasifikasi:	KLS1	~
Masukkan	Data	

#### Database Final Project

The library database system is meant to improve operational efficiency by allowing librarians to easily control book transactions, memberships, and collections, while also giving members with online access to book availability.



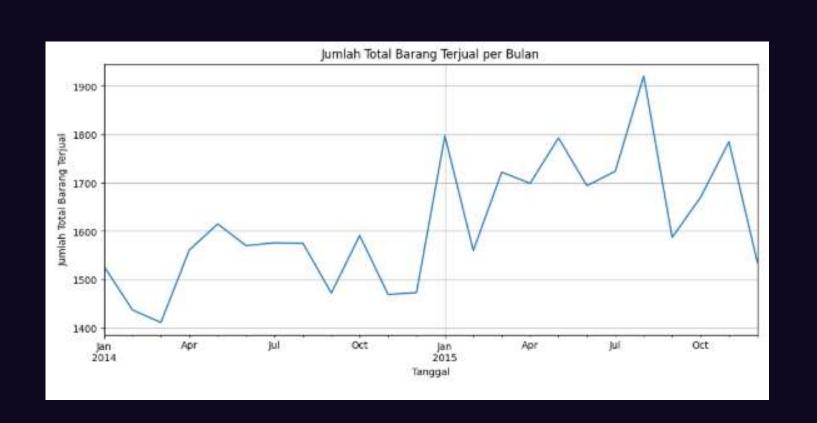


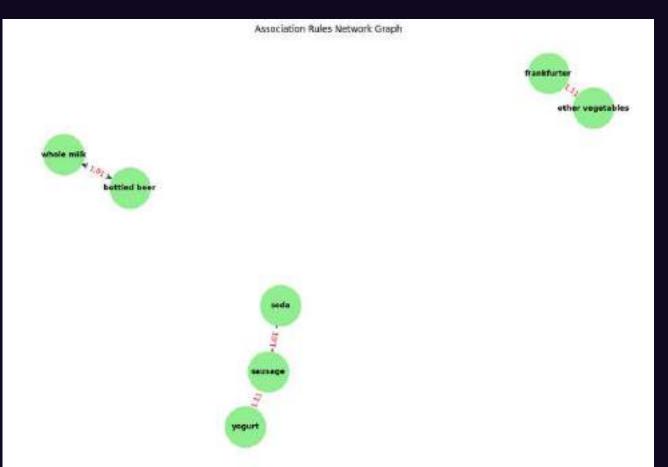


To learn more, click here.

GUI, Database Management, SQL, Diagram Relational

#### Market Basket Analysis at Wholesale Store





Data Mining, Preprocessing, Data Visualization, Market Basket Analysis, and Algorithm.

colab



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This study can assist

and in boosting sales

identifying the pattern

of purchases using

association rules.

the

company

consumers

determining

product's

through

possible

advertising,

hospitality

and

in

the

best

and

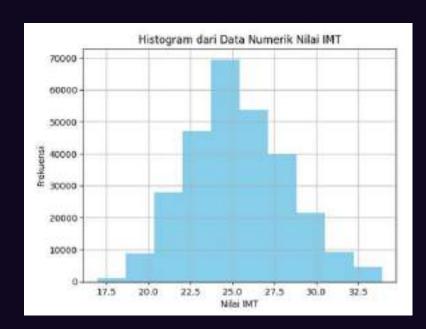
by

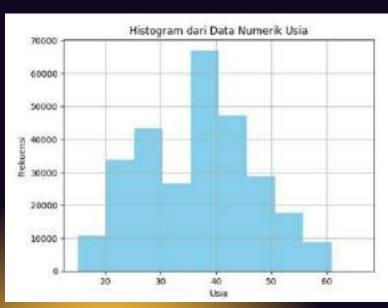
relevance

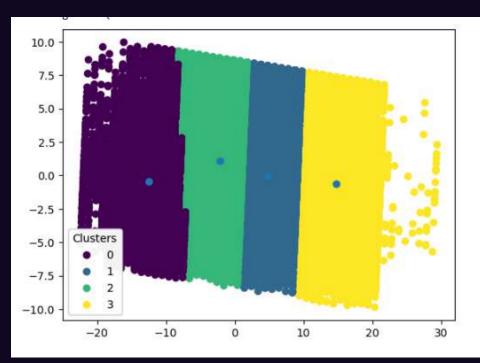
packaging,

To learn more, click here.

#### Body Mass Index and Smoking Behaviour







This study investigates the relationship between body mass index and smoking practices and presents the results in the form of four separate health clusters. A comparison of methods with and without parallel programming is also conducted.

To learn more, click here.

```
[ ] if __name__ == "__main__":
    X = df_num.values
    n_clusters = 4

    start_time = time.time() #Memulai pengukuran waktu
    cluster_labels, centroids = parallel_kmeans(X, n_clusters) ##Menjalankan algoritma K-Means paralel
    end_time = time.time() #Mengakhiri pengukuran waktu
    running_time = end_time - start_time #Menghitung waktu

    print(f*Time taken for parallel kmeans: {running_time} seconds*)

Time taken for parallel kmeans: 34.09055733680725 seconds
```

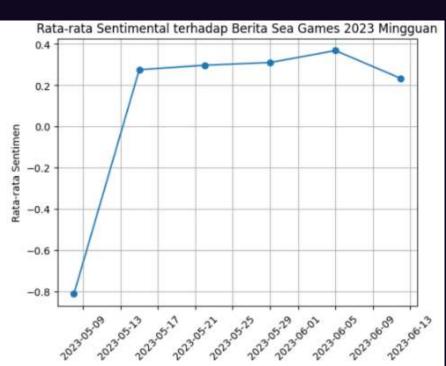


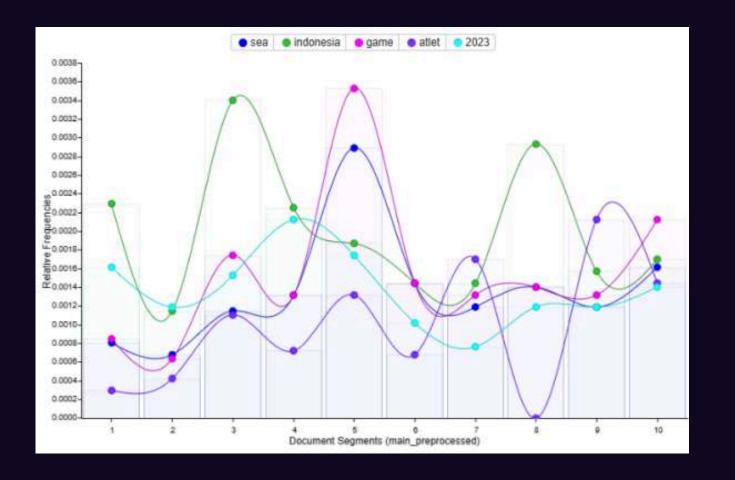


Pre-processing & Data Cleaning, Data Wrangling & Aggregate, and Data Visualization.

#### Sea Games 2023 Trend News







To learn more, click here.

Pre-processing & Data Cleaning, Normalitation, Qualitative Analysis, and Data Visualization.

Data Exploration & Visualization Final Project

Sea Games 2023, hosted in Kamboja, have a considerable emotive shift of emotion, according to the Detik.com news data research.





Level of Indonesian Educational Completion rate by Indonesian Province 2020 - 2022 Infographic

Based on infographic, the percentage of completion of education in Indonesia, there are significant differences between provinces.



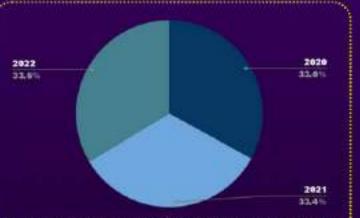


Survey, Market Analyst, Pre-processing & Data Cleaning, Quantitative Analyst, Multivariate Analyst, and Data Visualization.

Tingkat Penyelesaian Pendidikan Menurut Jenjang Pendidikan dan Provinsi 2020-2022



Presentase tingkat penyelesalan pendidikan menurut jenjang pendidikan yaitu SD, SMP, SMA pada 34 Provinsi di Indonesia



Presentase tingkat penyelesaian pendidikan pertahun dalam range 2020-2022 tidak menunjukkan perbedaan yang signifikan namun terjadi kenaikan tingkat penyelesaian pendidikan pada tahun 2022



Tingkat penyelesaian pendidikan SD pada setiap tahun (2020-2022) paling memiliki presentase tertinggi yang disusul oleh tingkat penyelesaian SMP. Sedangkan tingkat penyelesaian pendidikan SMA memiliki presentase terendah setiap tahunnya.

#### Hasil Uji MANOVA

Dengan hasil uji MANOVA didapatkan terdapat perbedaan yang signifikan antar variabel dependen multivariat pada kelompok yang berbeda-beda.

Vanny Khairunnisaa 2206051506 Badan Pusat Statistik



Presentase Tingkat Penyelesaian Pendidikan pada tahun 2020-2022 tertinggi berada pada nilai 93.8% oleh Provinsi Yogyakarta dan disusul oleh DKI Jakarta sedangkan penyelesaian pendidikan terendah pertama berada pada nilai 71.78% oleh Provinsi Nusa Tenggara Timur.

#### Penyelesaian Pendidikan SD



Nusa Tenggara Timur

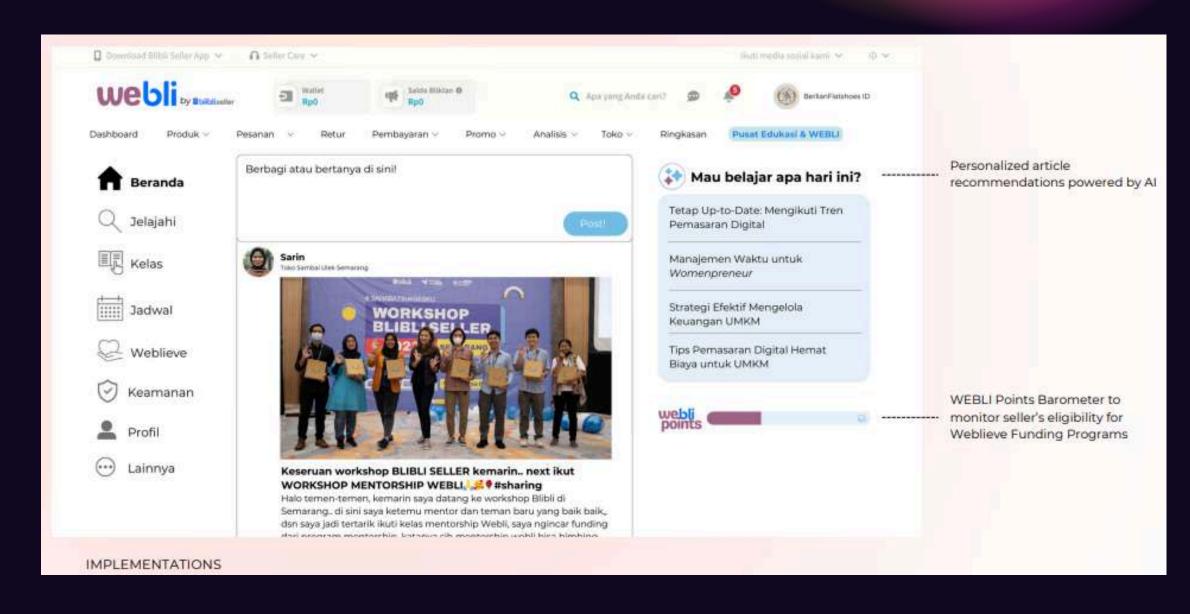
### Latest Competition

Mini Business Competition
By UIWB X Blibli



WEBLI - Women Entrepreneur of Blibli

An inclusive section within the Blibli Seller Center website and app dedicated to fostering a secure and empowering digital marketplace for women, particularly SME owners.







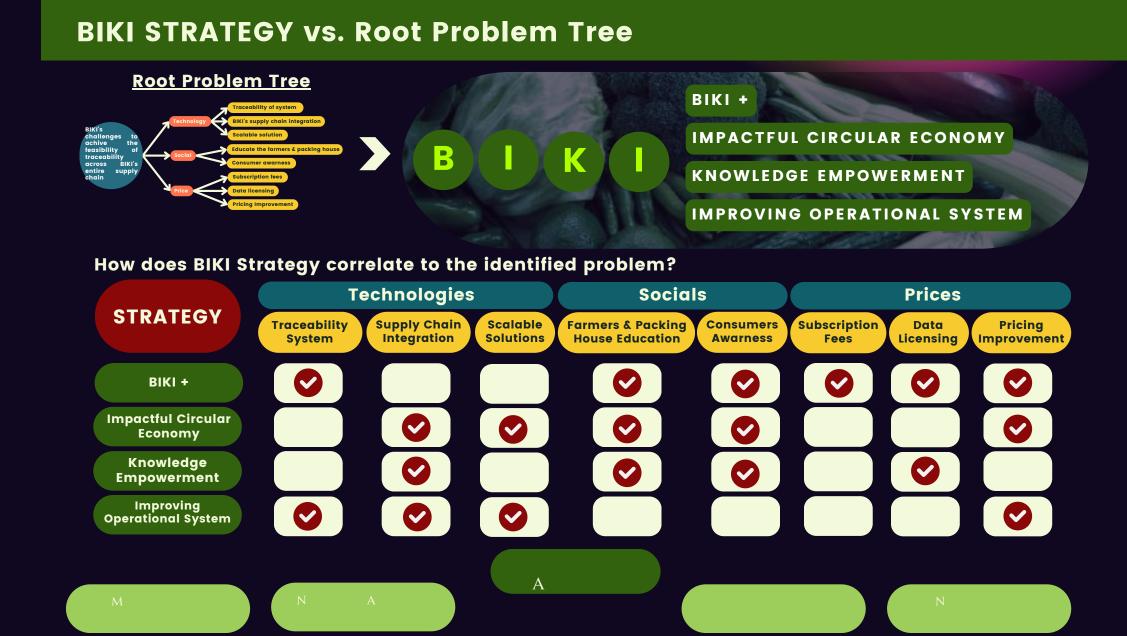


### Latest Competition

#### MSS FEB UI

BIKI +

Impactful circular economy plan to solve Indonesia's food challenges while also providing knowledge empowerment to all parties and improving the BIKI operational system.





### Certificate

01



WCE PARAGONCORP CERTIFICATE OF PARTICIPATION is presented to Vanny Khairunnisaa For being the Participant at External Training Weekend Career Expo x TPARAGONCORP with the following theme: **How To Build Your Personal Branding** SYAFIRA PUTRI S. **FEBRINA JEMIMAH** ATHAYA RANA TANIA ANNISA Project Consultant Senior Advisor Project Consultant Senior Advisor WCE 2024 WCE 2024 WCE 2024

02

# Certificate

03



04



## Certificate

06

CERTIFICATE

OF PARTICIPATION

This certificate awarded to

Vanny Lairunnisaa

From Biro Relasi

For participating in the

MATHEMATICS LEADERSHIP I

by Himpunan Mahasiswa Departemen Matematika 2023

Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Indonesia

Chairman of

HMDM FMIPA UI 2025

Mathematics Leadership I 2025

Muhammad Indi Dziya Lorika

NPM.2106726075

NPM.206053765

SERTIFIKAT Diberkan Kepada Vanny Khairunnisaa Atas Partisipasinya sebagai Peserta E-Class 2022 Terima kasih atas partisipasi Anda dalam acara E-Class dengan tema "Business Strategy for 2023" diselenggarakan oleh Himpunan Mahasiswa Departemen Matematika Fakultas Matematika & Ilmu Pengetahuan Alam Universitas Indonesia Pada 19 Januari 2023 KETUA UMUM KETUA PELAKSANA HMDM FMIPA UI 2022 E-Class 2022 FIKRIBAIKKONEN GHEFBRA NUR FATIMAH NPM. 2206026486 NPM: 2006483694

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