IDA SRI AFIQAH

Data, Al, and Quantitative Finance Enthusiast **PORTFOLIO**



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4.

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CERTIFICATION

List of earned certifications and professional licenses.

1.) ABOUT

I'm an economics student at Brawijaya University, highly enthusiastic about data analytics and skilled in SQL, Python, TensorFlow, Scikit-Learn, and Tableau. And I'm currently TensorFlow Developer certified.

I like to design and optimize data processing, create interactive dashboards, and develop predictive models to ensure efficient and accurate data analysis, that can help companies to focus on better decisions and the strategy for achieving goals in business.



2. EDUCATION



University of Brawijaya

(2021 - 2025)

DEGREE/ STUDY PROGRAMS

S-1, Bachelors in Economics/ Finance and Banking Concentration

CGPA

3.57

RELEVANT COURSE

Mathematics, Statistics, Econometrics, Time Series Analysis, Advanced Econometrics, Risk Management.

EXPERIENCE

Junior Researcher at Lab IE

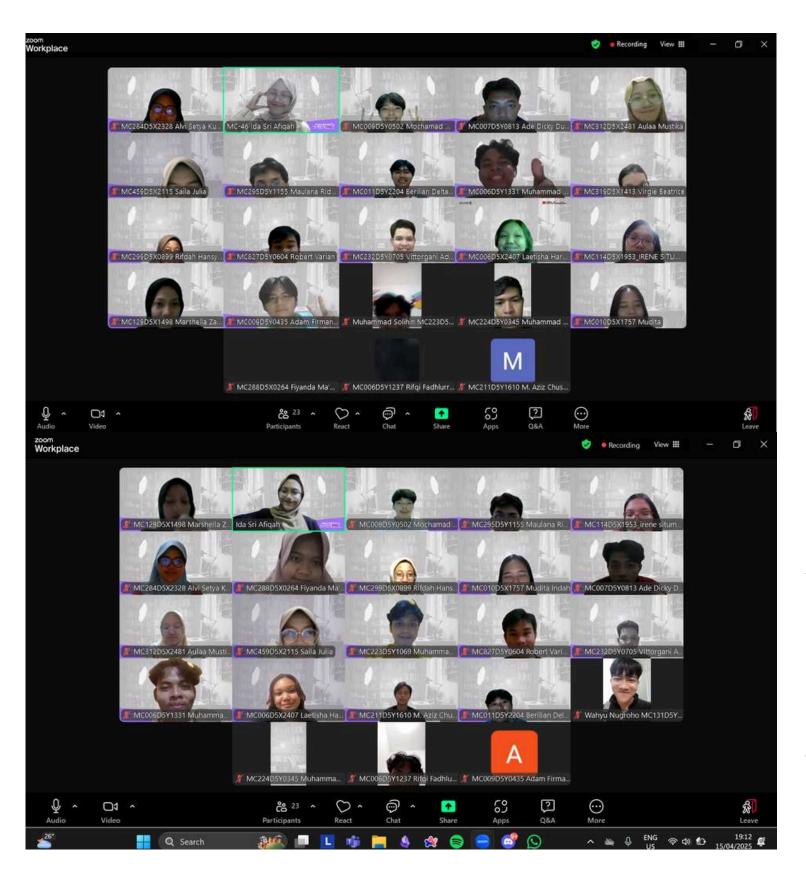
3. EXPERIENCE

I've engaged in diverse projects that have shaped my career. Through independent studies, internships, and community initiatives, I've gained valuable experiences influencing my professional development.

I've led teams, mentored colleagues, and developed strategic insights to enhance performance. These experiences have honed my skills in data analysis, machine learning, and project management, all crucial for my professional growth.



Experience



Mentor Machine Learning Class

DBS Foundation x Dicoding February - June 2025

I delivered weekly sessions on machine learning modeling to over 20 participants, providing them with hands-on experience and expert guidance. Through one-on-one consultations, I achieved an impressive 95% attendance rate and a participant satisfaction rating of 4.85/5. My focus was on empowering mentees to apply machine learning to real-world business problems, with a strong emphasis on driving impact and ensuring interpretability of results. This experience allowed me to make a tangible difference in the skills and knowledge of participants, ultimately contributing to their growth and success in the field.

Experience



Advisor Capstone Project and Company Project

at Bangkit Academy led by Google, Tokopedia, Gojek, & Traveloka!

Nov - Dec 2024

As a team advisor, I have experience guiding a total of 6 teams with different project themes. I also successfully guided teams on final projects at Bangkit Academy, resulting in a 91% graduation rate with an average performance rating of 4.6. This experience demonstrates my ability to lead teams and achieve significant results.



Directive Koy Result Review

Objective Representative Advantage and Analysis and content of the Security Content of the



As the leader of the Data Science and Analytics division, I have been instrumental in optimizing project performance and delivering exceptional business value. Since March 2024, I have overseen and coordinated division meetings, ensuring progress and alignment among teams.

One of my key responsibilities has been implementing and executing quarterly OKR initiatives and achieved 100% program adoption.

Experience



Halo semua! Bagaimana kabar hari ini? 🐸 Kami baru saja menyelesaikan analisis menarik tentang Kereta Rel Listrik (KRL) atau Commuter Line. Proyek ini merupakan bagian dari upaya Braincore.id untuk memberikan wawasan kepada manajer, atasan, dan masyarakat Indonesia, terutama penumpang KRL, mengenai moda transportasi ini.

Kita semua menyadari betapa pentingnya KRL bagi masyarakat Indonesia, terutama dalam kehidupan sehari-hari dan di tempat kerja. Salah satu temuan menarik adalah wawasan terkait jumlah kereta yang beroperasi dan aktifnya stasiun-stasiun, serta pola lonjakan jumlah kereta yang beroperasi setiap harinya dalam periode waktu yang berbeda, mulai dari dini hari (1-4 pagi), pagi (5-10 pagi), siang (11 pagi-2 siang), sore (3-6 sore), hingga malam (7 malam-12 malam). Di dashboard ini kita juga dapat melihat berapa jumlah kereta yang tersedia di setiap stasiun beserta jalur dan rute masing-masing serta waktu pemberangkatannya. Kami juga



ng dapat diperoleh. Bagi yang ingin dashboard di bawah:

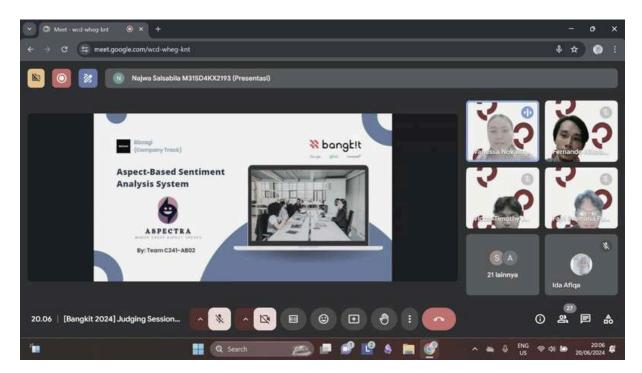
Data Scientist

at Braincore March 2024 - Present

I have strengthened my focus on developing and fine-tuning machine learning and deep learning models, especially in the field of Natural Language Processing (NLP). I apply various models for clustering, classification, regression, and time series analysis, such as apriori, RFM, cohort analysis, k-means, LGBM, linear regression, logistic regression, and ARIMA, to gain insights from data.

Utilizing libraries like pandas, numpy, matplotlib, scikit-learn, prophet, pycaret, and lazyclassifier, I perform comprehensive data analysis from start to finish, extracting valuable insights without solely relying on models. I also create advanced visualizations using Tableau and apply them to websites, ensuring that the data is both accessible and actionable for stakeholders

Experience





Company Track Advisor

at Bizzagi x Bangkit Academy led by Google, Tokopedia, Gojek, & Traveloka!

May - June 2024

Bizzagi x Bangkit Academy is a partnership betweens. As part of the Bangkit Academy, there is a final project, the capstone project, which includes three types of cases: entrepreneurship, product, and company cases. Bizzagi acts as a partner to Bangkit, providing company cases for the Bangkit Academy cohorts to work on.

I provide weekly guidance and mentorship to group members to help them understand the basic concepts and methodologies relevant to Aspect-Based Sentiment Analysis.

Assisted in formulating clear and measurable project objectives to ensure they met the needs and expectations of the end client or user, resulting in the team achieving a 95% validation accuracy score and as a best company capstone track.

Skill: Pytorch, Mentorship, Analytical Thinking, Communication, Team Collaboration



Junior Researcher at Lab Ilmu Ekonomi

January - July 2024

The Economics Lab managed by the Faculty of Economics and Business, Department of Economics, is an academic facility designed to support research, learning and skills development in economics. The lab provides a variety of tools, resources, and data needed to analyze economic phenomena, conduct economic experiments, and develop and test economic models.

- Responsible for conducting Econometrics training, 2 trainings that have been held are Difference in Differences which was attended by 70 people and a paid OLS Regression training.
- Teach and assist students to use econometric tools di lab.



Machine Learning Graduate

at Bangkit Academy

August - Dec 2024

Learnt the key concepts and applications of Data Analytics, Mathematics for Machine Learning, from foundational to cutting-edge Machine Learning algorithms, Deep Learning, as well as Model Deployment. In addition, several sets of soft skills such as growth mindset, critical thinking, problem-solving, time management, project management, and professional communication are also learned.

Capstone Project: PhysEdu

Build Name Entity Recognition model with 98% accuracy to recognize physics variable and make a template for number as an expression to be processed as an output





Facilitator in Program Google Arcade Facilitator 2024

at Dicoding x Google Cloud May - July 2024

This program is a coding scholarship from Google Cloud in collaboration with Dicoding with the concept of gamification to add or improve digital talent skills in the fields of cloud computing, application development, big data & artificial intelligence/machine learning.

Facilitator's jobdesk is:

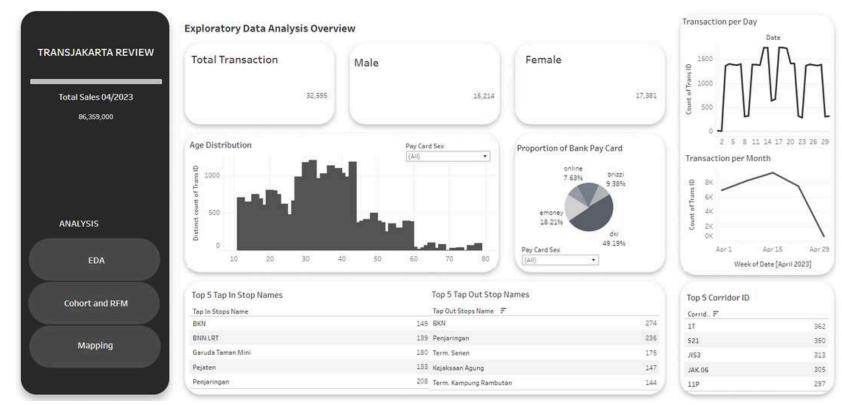
- Invited colleagues to join the Google Cloud Arcade Facilitator 2024 program and gained 135 participants.
- Encouraged and motivated participants to complete tasks, resulting in a total of 720 badges.
- Met the facilitator's target to assist and help complete the arcade, ranking among the top 6 facilitators.

Skill: Facilitator, Google Cloud Skill, Big Data, Al/ML, BigQuery





Embark on a journey through my diverse projects, where I've applied theoretical knowledge to real-world scenarios. From innovative independent endeavors to collaborative team projects, each venture has been a stepping stone in my academic and professional development.



Analisa RFM adalah metode paling umum yang digunakan marketer dalam menganalisa tingkah laku pelanggan, efisiensi dana pembuatan iklan, hingga meningkatkan profit penjualan. Tujuan dari metode RFM Analysis pada kesempatan ini ialah untuk mengkategorikan pelanggan berdasarkan beberapa kriteria. Efektivitas metode ini bergantung pada 3 parameter yang unik Recency = waktu berkunjung belakangan/baru-baru ini (Recency yang tinggi akan menjelaskan bahwa pembeli sudah lama sekali tidak bertransaksi) Frequency = banyak/jumlah mereka melakukan pembelian (pembelian yang tinggi berarti high-frequency). Monetary = banyak uang yang mereka spend untuk membeli (spend yang tinggi berarti high monetary). Segmentasi Pelanggan: Gunakan nilai RFM untuk mengelompokkan pelanggan ke dalam segmen yang berbeda. Contoh segmen: Leyal: Recency rendah, Frequency Linggi, Monetary Linggi. Savec: Recency rendah, Frequency Linggi, Monetary rendah, Monetary rendah, Potential: Recency Linggi, Frequency rendah, Monetary Linggi.



Strategi Marketing	
Rancang strategi marketing yang sesuai untuk setiap segmen pelanggan. Contoh:	
* Loyal: Tawarkan program loyalitas dan diskon khusus.	
* Churn: Tawarkan promo menarik untuk menarik kembali pelanggan.	
* Saver : Tawarkan Program Penghargaan Berbasis Frekuensi dan Bundling serta paket Hemat.	
* Potential: Tawarkan edukasi dan informasi tentang produk.	

TRANSJAKARTA WITH RFM, AND COHORT ANALYSIS AND K-MEANS

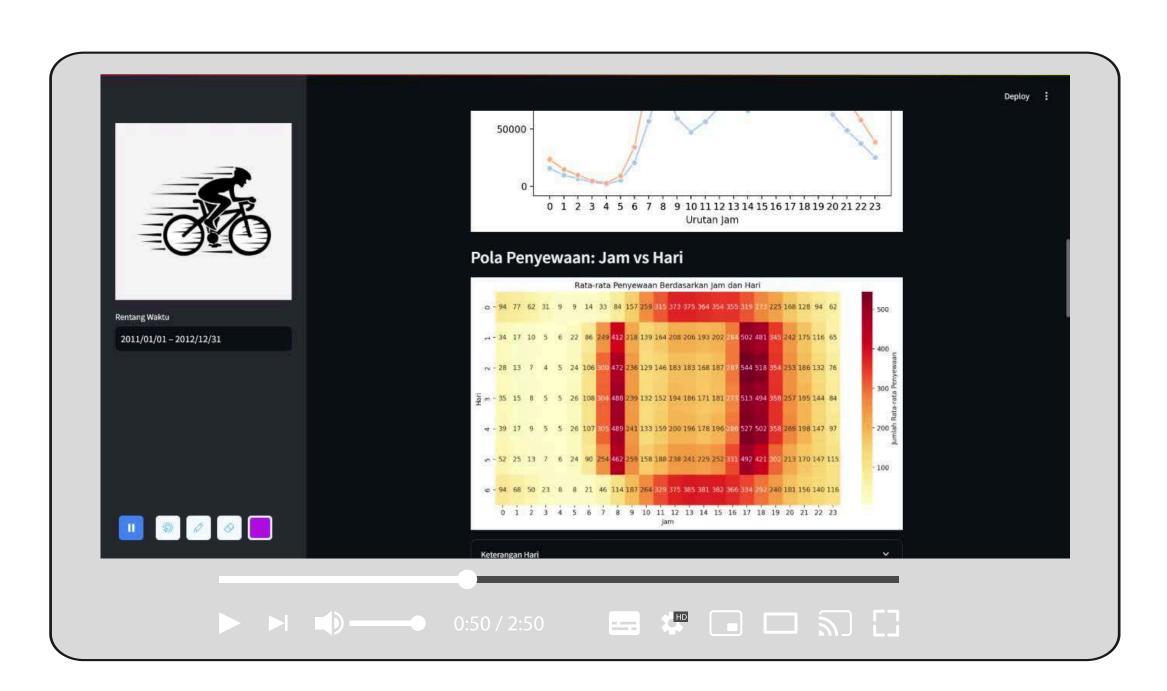
25 March 2024

- As a data analyst, i processed 37.9k rows of data and performed Exploratory Data Analysis on the Transjakarta dataset, answering 20 business questions.
- Used Cohort Analysis and RFM to gain insights into customer behavior and performed clustering with K-Means, providing marketing strategies to increase sales.
- Created advanced visualizations with Tableau, including navigation, maps, and various charts, to display EDA and modeling results.

tableau

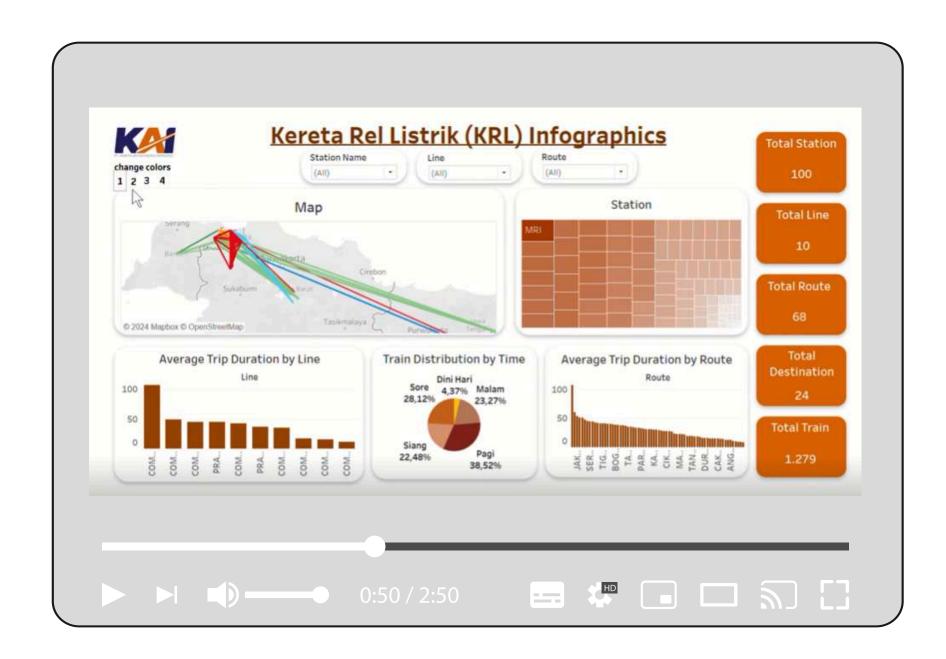
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BIKE SHARING ANALYTICS PROJECT



December 2024

- Processed and analyzed 731 rows of data through data wrangling and exploratory data analysis (EDA).
- Answered 8 business questions by identifying trends, user behavior, and operational insights.
- Developed an interactive dashboard using Streamlit to visualize key metrics and support data-driven decision-making.







KRL INFOGRAPHICS

18 March 2024

- As a data analyst, i processed 18k rows of data, collected, and combined latitude and longitude data.
- Conducted Feature Engineering, Exploratory Data Analysis, and answered 20 business questions.
- Created advanced visualizations in Tableau, including navigation, maps, and various charts to display EDA and modeling results.

We can see that the club is the most present of all transactions with 80% present. This is followed by sirup at 60% and pet food at 50% of all [] mba_rules = association_rules(support_item, metric="lift", min_threshold=1).sort_values("confidence", ascending=False) \ mba_rules["length_antecedents"] = mba_rules["antecedents"].apply(lambda x: len(x)) mba_rules["length_consequents"] = mba_rules["consequents"].apply(lambda x: len(x)) • /usr/local/lib/python3.10/dist-packages/ipykernel/ipkernel.py:283: DeprecationWarning: `should_run_async` will not call `transform 🗫 /usr/local/lib/python3.10/dist-packages/ipykernel/ipkernel.py:283: DeprecationWarning: `should_run_async` will not call `transform and should_run_async(code) [] filtered_mba[(filtered_mba["length_antecedents"] == 1) & (filtered_mba["length_consequents"] == 1)] 🚁 /usr/local/lib/python3.10/dist-packages/ipykernel/ipkernel.py:283: DeprecationWarning: `should_run_async` will not call `transform and should_run_async(code) consequents support confidence lift length_antecedents length_consequents 81 (Celana Jeans Sobek Wanita) 1389 (Shampo Biasa) (Koper Fiber) 0.064 0.105960 1.324503 1413 1422 1439 378 rows × 7 columns

Brief Summary

Based on the market basket analysis results, we found that the Sunblock Cream product has a support of 0.059 or about 5.9%. This indicates that the product is only purchased in 5.9% of the total transactions. From the above rules, it states that there are 20.9% of transactions that buy Women's Torn Jeans Pants also buy Regular Shampoo. This shows that the two products are often purchased together by women. From the above rules, there is also a rule with 6.2% of transactions where the purchase of Women's Black School Shoes is followed by the purchase of Children's Sandal Shoes with 85% confidence, which means that the correlation is getting higher.

Recommendations

Here are some recommendations based on the results of the analysis:

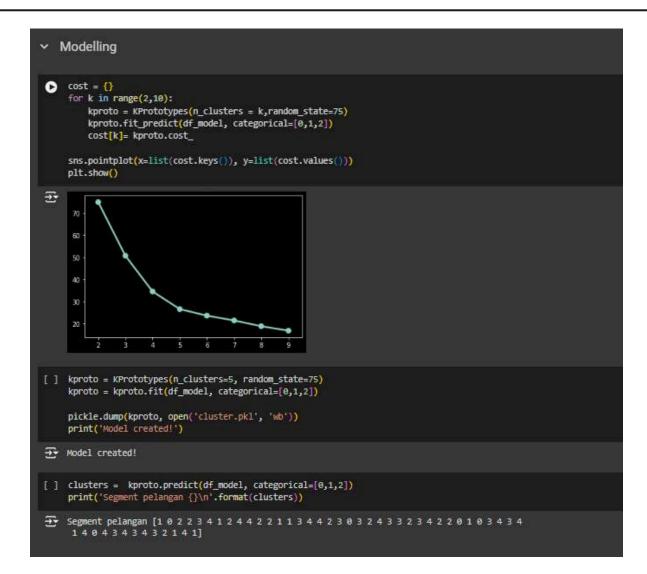
- Based on the results of the market basket analysis, we found that the Sunblock Cream product has low support, which is 0.059 or around 5.9%. This indicates that the product is not frequently purchased by customers. Therefore, we recommend reducing the stock quantity of the product.
- We recommend the company can place Shampo Biasa products in cashier, so customer whose buy Celana Jeans Sobek Wanita can buy
 this product. This can make it easier for customers to find both products at the same time.
- The company can place Sepatu Sekola Hitam Wanita and Sepatu Sandal Anak close together on the shelf or storefront. This can make it
 easier fo customers to find both products at the same time.

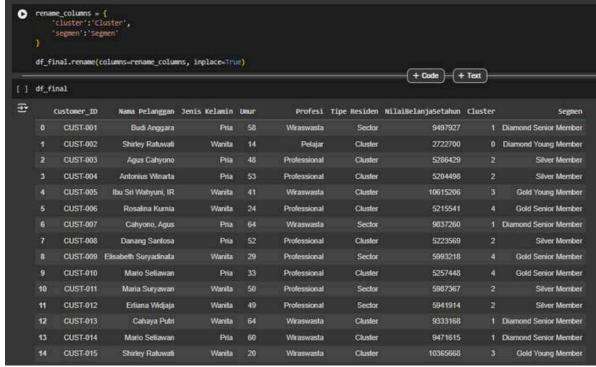
REAL TIME APRIORI

29 January 2024

- Apply the Apriori algorithm to analyze purchase patterns in market basket data, identifying relationships between items that are frequently purchased together.
- Develop a web application to interactively show market basket analysis results to users, using web technologies such as Flask.
- Enable users to explore market basket analysis findings, optimize sales and promotion strategies, and improve the shopping experience through more personalized product recommendations.







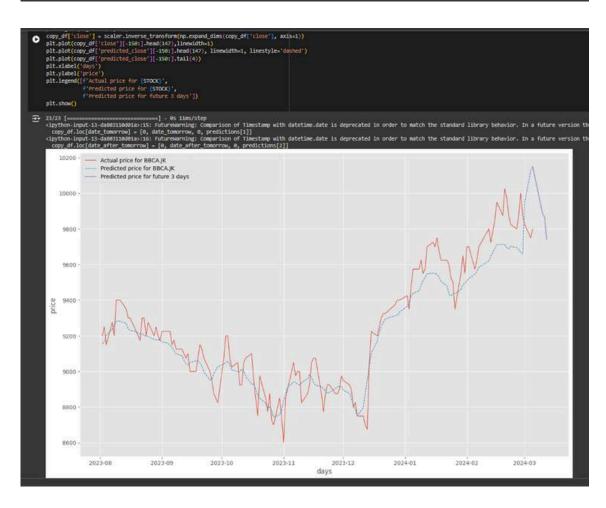
REAL TIME CLUSTERING

20 February 2024

- Using K-Prototypes algorithm to segment customers based on numerical and categorical attributes.
- Identified different customer patterns and groups based on shopping behavior and product preferences, also make visualization with tableau
- Apply this approach to improve market targeting and service personalization, increase customer retention, and improve overall customer satisfaction.



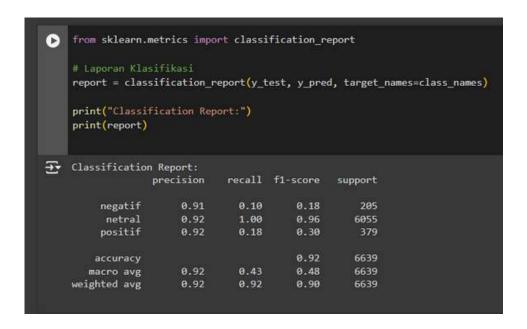


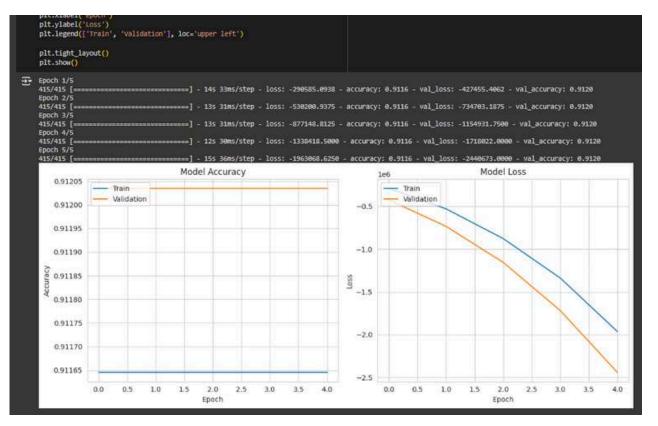


PREDICTING BBCA SHARES

10 March 2024

- Build a BCA stock price prediction model using LSTM (Long Short-Term Memory) technique with the help of TensorFlow and Keras.
- Using historical stock price data from Yahoo Finance and preprocessing using MinMaxScaler to normalize the data.
- Trained the model using an LSTM artificial neural network to understand patterns and trends from historical data, aiming to accurately predict BCA's stock price, and achieved a metrics mse loss score of 0.0030.





SENTIMENT ANALYSIS DEBATE PEMILU

12 January 2024

This project aims to analyze the sentiment of statements appearing in general election debates in Indonesia. In this project, we combine a lexicon-based approach with VADER (Valence Aware Dictionary and sentiment Reasoner) and a deep learning method using Convolutional Neural Network (CNN) for sentiment classification, VADER Lexicon is used to provide an initial value of sentiment from the debate text.

Convolutional Neural Network (CNN) is chosen as the classification model due to its ability to extract spatial features and capture important patterns from textual data. CNN will process the processed debate text to identify the sentiment contained, whether it is positive, negative, or neutral with 92% validation accuracy.

```
Training the NER model

(**Python -** spacy train config.cfg --output ./ --paths.train ./model.spacy --paths.dev ./model.spacy

2**Paths.1:13:19:15:53:999433 & tensorflow/compiler/via/stream_peccutor/coda/coda, fft.-ccompiler/via/stream_peccutor/coda/coda, fft.-ccompiler/via/stream_peccutor/coda/c
```

Aspect Based Sentiment Analysis (ABSA)

12 April 2024

- Scraped reviews from Google Maps to create a dataset for training Aspect-Based Sentiment Analysis models, collecting 1k reviews.
- Developed and fine-tuned models for sentiment analysis, achieving 78% aspect accuracy and 65% polarity accuracy.

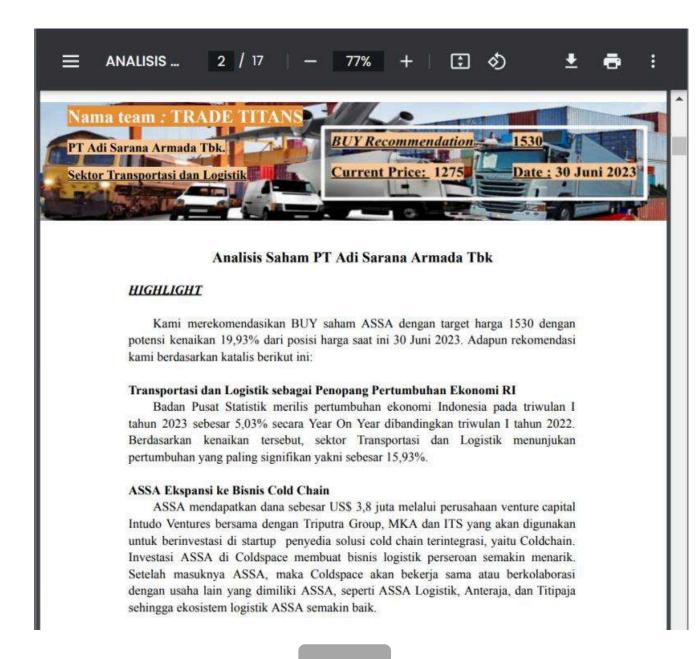
<u>link code</u>

Name Entity Recognition model in Physics Problem Solving (NER)

12 December 2024

- Annotating physics variables in physics problems
- Using NER spacy to pipeline the model and produce a model with a good score of 98%.

link code



Stock Analysis of PT Adi Sarana Armada Tb (ASSA) 15 July 2023

In this project, I led a team to conduct a comprehensive stock analysis of PT Adi Sarana Armada Tbk (ASSA), a leading company in the Logistics and Transportation industry. Our objective was to provide investors and stakeholders with actionable insights for informed decision-making. The analysis covered the company's business model, macroeconomic factors, industry landscape, and competitive positioning, employing frameworks such as Porter's Five Forces, ESG-GCG analysis, financial analysis, risk assessment, and technical analysis. This thorough examination identified potential risks and opportunities, culminating in an investment summary that offered strategic recommendations based on rigorous evaluation.



PHYSEDU: Smart Camera Calculator and Learning for Junior High School Physics Needs.

November - December 2023



Physedu is a personal physics problem solver in a pocket. Our app solving physic's problem through the camera photos or import images from the gallery and provide the available physics material and do the exercise questions that have been provided.

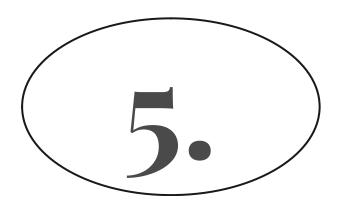
As a machine learning engineer, i build Name Entity Recognition model with 98% accuracy to recognize physics variable and make a template for number as an expression to be processed as an output and integrate the ocr and nlp model to generate output from physics story problems.

tech stack: nlp, google cloud service platform.

github

pitchdeck

Achievement



ACHIEVENENT









2nd Winner Makassar Hackathon 2024: Dispora Makassar x Binar Academy

At the Makassar Hackathon 2024, I achieved 2nd place with our project "Fitpedia: Enhance Your Fitness Journey." Fitpedia is an Alpowered mobile platform designed to help users adopt a healthy and active lifestyle. The app provides comprehensive guidance, monitors healthy living patterns, offers personal motivation, and improves accessibility for users looking to enhance their overall well-being. This innovative solution addresses the growing need for accessible health tools and contributes to improving public health by making it easier for individuals to stay on track with their fitness goals.

6. CREDENTIAL AND CERTIFICATION

In my continuous pursuit of professional growth and expertise, I have obtained several licenses and certifications that validate my skills and knowledge across various domains. These credentials not only demonstrate my commitment to staying updated with the latest industry standards but also equip me with the tools necessary to excel in my field. From advanced certifications in data science and machine learning to specialized training in project management and software development, each certification reflects my dedication to mastering the essential competencies required to drive innovation and deliver results in a fast-paced, technology-driven world

Credential (22)



Azure Al Fundamentals

TensorFlow Developer



IBM AI Engineering





Azure Data Fundamentals

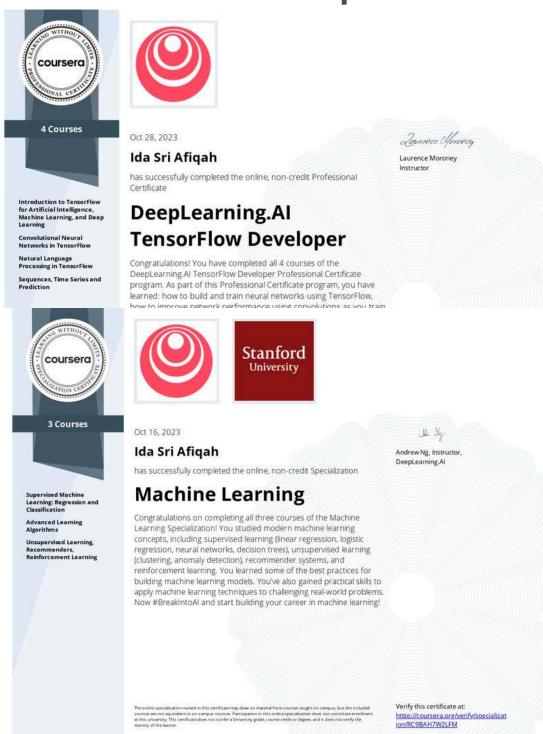
Certification (24)



Google Data Analytics Specialization

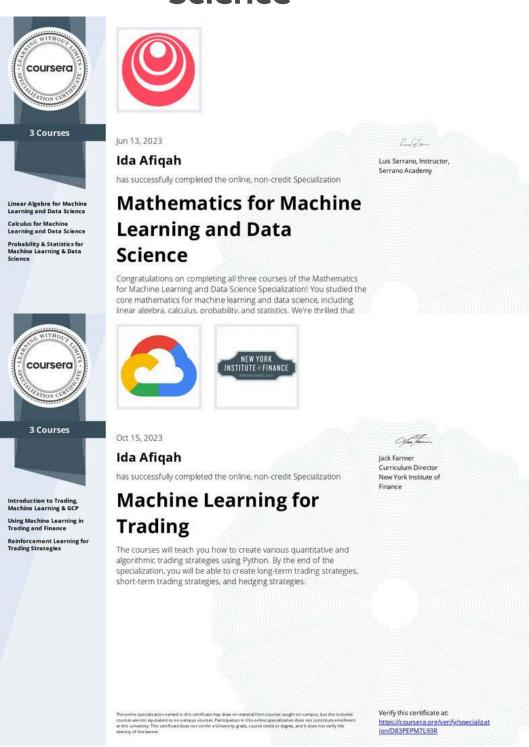
Certification

DeepLearning.Al TensorFlow Developer



DeepLearning.Al Machine Learning

Mathematics for ML and Data Science



Machine Learning for Trading

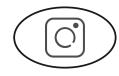
MLOps I Machine Learning Operations



DeepLearning.Al TensorFlow Data and Deployment "Learn is accumulation of mistake we made and every day is a new chance to make another one and day one you'd do better."

-Fikaaw

THANKS!

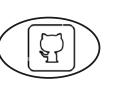














afiqaahida@gmail.com +62 856 0047 6550 link for web porto (soon!)

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