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HIGHLIGHTED PROJECTS

Pharma Sales Dashboard: Kimia Farma, Indonesia   Jan 2025
- **Visualized drug sales in Kimia Farma**, a pharmacy retail widespread across Indonesia, with Looker from an anonymized dataset of 150 products, 1762 branches, and 600K+ transactions for 4 years.
- **Displayed 5 metrics**: average ratings, total sales, quarter with most profit, top branch, and top product, **along with data filters** of islands, provinces, city in respective provinces, and year period.

SportsLogs: Sports Logging Web App Dashboard   Nov 2024 - Jan 2025
- Transformed 10+ different datasets of 16 players from biometric sensor (FitBit), sports logging (PMSys), and subjective score (Google Docs) into a dashboard showing the performance in Streamlit
- Visualized the dashboard in two parts: "The Whole Team" and "Individual Player" (p01 - p16), both are composed of calories burned, sport activities and their metrics, wellness score, up to sleep stages

Youtube Metrics Web App Dashboard   Nov - Dec 2024
- Transformed datasets of aggregated metrics of 200+ videos by country and subscriber status, along with comments and performance over time, into a web app with Python (Plotly) and Streamlit
- Displayed **Aggregate Metrics** on median over 6 months with its performance compared to the past 12 months, and metrics in performance to gain insights for optimizing users impressions
- Displayed **Individual Video Analysis** on number of views per subscribed users along with top 10 countries, and views comparison in 30 days after published

Dashboard of Research Payments in Healthcare in the United States 2023   Sep 2024
- **Visualized ~400K records** of research payments in healthcare by Non-Covered Recipient Entity (NCRE) in the US **via Tableau connected to a database server in BigQuery**
- Extracted the data of NCREs from OpenPayments CMS, cleaned the data from ParsingError, and **conducted data analysis** through **queries with BigQuery and Python**
- **Showcased relationships** of NCREs by state and city, along with **most-funded categories** of therapeutic areas, products, and NCREs, **and filters** of Top N, Product Category, and Smart Search

Product Segmentation and Customer Classification of Online Retail Transactions   Aug - Sep 2024
- **Cleaned 1,000,000+ data** of 2 years worth of transactions in an online retail company into **760K+ invoices**, with cancellations cleaned from rows into a column for easier revenue calculation
- **Clustered** the data using KMeans for marketing purposes into **6 categories of products and 11 categories of customers,** with visualizations of **WordCloud** for contents of product categories, **PCA** for checking the clusters validity, and **RadarChart** for each profile of customers, and horizontal stacked bar chart for **transactions per category in 40+ countries**
- **Classified customers** with machine learning of 3 models inside a **VotingClassifier** with an accuracy score of **91.5389%**

Drug Reviews Dashboard and Sentiment Analysis, drugs.com   May - Jul 2024
- **Cleaned 390,000+ data** by streamlining variables of intake time, reviews, and mixed formats of drug brand names, usage, and generic names, and **converted it into PostgreSQL and BigQuery database**
- **Created a dashboard of drug reviews** as a customer-based reference via Tableau, featuring a bubble chart of drug usages, top drug brands, and top reviews by number of likes
- Applied **sentiment prediction** using **deep learning and transformers** with accuracy of **80,98 %**

TECHNICAL SKILLS

- **Programming Languages and Tools :** Python, R, SQL (Postgres, BigQuery), Tableau, Looker, dbt
- **Libraries :** Pandas, NumPy, matplotlib, seaborn, scikit-learn, scikit-lego, Keras, TensorFlow, PyTorch, transformers, psycopg2, NLTK, requests, selenium, BeautifulSoup4, Plotly, Streamlit
- **Languages**: Indonesian (Native), English (C1), German (B2) and Italian (A1)

EDUCATION

Bandung Institute of Technology (ITB)   Aug 2018 - Nov 2023
Bachelor Science of Biomedical Engineering   Bandung, Indonesia
- **Took 149 credits** ranging from biomedical, life sciences, up to strategy and management courses. Notable ones included: Healthcare Management and Assessment of Technology, Biomedical System Design, Cell Therapy and Tissue Engineering, Financial Planning, Probability and Biostatistics
- **Joined several organizations:** Ganesha Model United Nations Club (GMUNC), South Celebes Unit of Arts (UKSS), and Electrical Engineering Student Association (HME ITB), National Youth Summit for Renewable Energy (NYSRE) 2020, Edufair Palu
- **Thesis Project:** Development Of Multi-Analyte Biosensor based on Screen-Printed Carbon Electrode (SPCE) Modified With Graphene Oxide and Gold Nanoparticles (GO-AuNP)

EXPERIENCE

Study Review on CAR-T Cell Therapy: Axicabtagene Ciloleucel   May 2023
- Conducted a study review in collaboration with Biology students of ITB on a biotechnology product of CAR-T Cell Therapy: **Yescarta™ (Axi-Cel) for Diffuse Large B-Cell Lymphoma (DLBCL)**
- Reviewed characteristics and biomarkers of DLBCL, and properties of CAR-T: pharmacological characteristics, mechanism of action, process of production, and latest updates.of the product

Automatic Needle Burner for Medical Waste Management   Jan - Dec 2021
- **Built a medical device directed to COVID-19 medical workers** in collaboration with Mechanical Engineering students of ITB (conducted in hybrid schedules with monthly progress reports)
- Mapped specifications, constraints, and design alternatives for the prototype, made **diagrams of Model-Based Systems Engineering (MBSE)** referring to the subsystems of design, and lastly implemented testing and troubleshooting for development of the prototype
- Created a portable needle burner capable of **burning the tip, detaching the hub, and putting the detached piece into the storage in under five seconds** for medical waste management

Blueprint: Building an Imaging Hospital in Indonesia   Aug - Dec 2021
- Constructed a draft proposal of **an imaging hospital** in Indonesia mainly **referring to regulatory requirements** from Indonesia's Ministry of Health
- **Provided necessary components of hospital into account**, such as medical equipment for several areas in anatomy, information systems in medical imaging, main human resources, up to budgeting and digitally-mapped interior design
- Calculated a budget analysis to cover the needs for hospital with an estimated total of **IDR 24.712B**

Health Technology Entrepreneurship – Mental Health Apps for College Students   Aug - Dec 2021
- Led and developed a business plan in healthcare technology of *Something*: **a SaaS platform for mental health aimed at college students in Bandung City** by incorporating features such as medical counseling, daily questions, reminders, and gathering of communities with mutual struggle.
- Defined milestones, financial forecasts, and partnerships referred to business model and value proposition canvas, estimating a reach of **~100,000+ college students in Indonesia in 5 years with a profit generation of IDR 2,989B**
- **Presented the final pitch** together with an app demonstration to Biomedical Engineering students of ITB and Medicine students of UNAIR (Airlangga University) for feedback in medical perspective.

CERTIFICATIONS AND ONLINE COURSES

- **Pfizer UK: Molecule to Market - Virtual Experience Program on Forage**   Jun - Jul 2024
- **Dataquest.io: Data Scientist in Python**   Nov 2023 - Mar 2024
- **How To Grow (Almost) Anything, MIT Media Lab**   Feb - May 2023
- **BCI & Neurotechnology Spring School, g.tec medical Engineering gmbH**   Apr - May 2022