

Ariq Dreiki Hajjanto

-Data Analyst-

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PERSONAL PROFILE

A Biomedical Engineering graduate with a 3.52 GPA from Institut Teknologi Sepuluh Nopember (ITS), seeking a Data Analyst position. I bring a strong foundation in data analytics, problem-solving, and technical skills in Python, Tableau, and SQL. I aim to apply my data interpretation and analytical abilities to deliver impactful insights and contribute to the success of your organization.

EDUCATIONAL BACKGROUND

Institut Teknologi Sepuluh Nopember (ITS) - Surabaya, Jawa Timur

Sept 2020 - Aug 2024

Biomedical Engineering - GPA 3,52 /4,00 (Cumlaude)

- Relevant subjects: Human-Machine Interaction, Data Processing, Mathematics, Basic Statistics, Intelligent Systems, and Programming.
- Achievements: Achieved 7th Place of The Best Academic for the second semester of 2020/2021 | Accomplished a Short Program of Embedded Programming in Shibaura | 1st Place Best Organizer with a score of 91.6 | 1st Place of The Best Academic for the eight semester of 2023/2024 | GEMASTIK XVII Finalists

<https://its.idm/AriqDreikiHajjantoCertificate>

TECHNICAL SKILLS

- **Programming Languages:** Python (Pandas, NumPy, Matplotlib, Seaborn), C++, Pascal, SQL
- **Data Analytics Tools:** Tableau, Looker, Excel, Google Sheets
- **Databases:** PostgreSQL, MongoDB, phpMyAdmin
- **Big Data Technologies:** Hadoop, Apache Spark
- **ETL & Data Pipelines:** Apache Airflow
- **Machine Learning:** CNN, VGG16, MobileNet, SVM, DT, Linear & Logistic Regression, Scikit-learn, PyTorch
- **Other Tools:** Jupyter Notebooks, Git

PROFESSIONAL EXPERIENCE

Badan Riset dan Inovasi Nasional (Internship)

Jan 2023 - March 2024

Research Assistant

- Succeeded in developing localization and segmentation techniques for brain tumours leveraging Convolutional Neural Networks (CNN) with Python programming language with accuracy achieved at 98% for Recall and 93% in Dice Similarity Coefficient.
- Collaborated with a team on publishing the international journal focused on machine learning, and the International Journal of Electrical and Computer Engineering (IJECE) as a publisher, graded as Q2.
- Presented complex data findings to cross-functional teams, facilitating key research decisions.

ITS Global Engagement (Internship)

Dec 2021 - Jan 2023

Hospitality Division Staff

- Chaired an English Training event, in collaboration with the Shibaura Institute in Japan, with a total of 56 students. It consisted of 27 students from Shibaura Institute and 29 students from ITS.
- Handled University Mobility in Asia and the Pacific (UMAP) project organized by ITS Global Engagement, involving 20 international students from eight countries: Taiwan, the Philippines, Bangladesh, Myanmar, Hong Kong, Macau, Paraguay, and Malaysia.
- Managed program logistics and provided analysis on participant engagement and feedback

KEY PROJECTS

Churn Prediction Challenge (IBM, Coursera)

Oct 2024

- Developed a customer churn prediction model that achieved an ROC AUC score as 75%, using machine learning techniques to analyze customer behavior, placing in the top 5% of a competitive challenge.
- Explored and analyzed more than 240.000 customer data points using Python, scikit-learn, and pandas for feature engineering, improving prediction accuracy by 15%.
- Utilized strategies to improve model accuracy, focusing on actionable insights for improving customer retention.

Data Engineering Capstone Project (IBM, Coursera)

Oct 2024

- Managed relational and semi-structured data using PostgreSQL, MongoDB, and phpMyAdmin to efficiently query, store, and organize databases.
- Created insightful data visualizations on Looker, translating large datasets into actionable business insights.
- Processed and analyzed big data using Hadoop and Apache Spark, optimizing speed and scalability of data operations, while automating ETL pipelines with Apache Airflow for seamless data integration.

Classification of Brain Tumor Types Using Hybrid VGG16-SVM

Mar - Jun 2024

- Accomplished a 95.7% accuracy in classifying 5023 brain tumor images into three classes, which are meningioma, glioma, and pituitary, by constructing a hybrid model.
- Applied features reduction from 25088 to 1000, as measured by Principal Component Analysis, by applying feature engineering methods.
- Visualized 1000 extracted features data from MRI images to analyze the nature of the features and insights.

Brain Tumor Detection Using a MobileNetV2-SSD

Jan 2023 - March 2024

- Integrated MobileNetV2, a modified Feature Pyramid Network (FPN), and Single Shot MultiBox Detector (SSD) to detect meningioma tumors with 98% recall and 89% precision.
- Demonstrated superior model performance with a Dice Similarity Coefficient (DSC) and Index of Similarity of approximately 93%, highlighting significant advancements in brain tumor localization and detection.
- Advanced data pre-processing techniques such as grayscale conversion, histogram equalization, and Gaussian filtering increase the picture quality of MRI datasets, leading in higher tumor segmentation accuracy.

CERTIFICATE

• Certificate:

- Python for Data Science, AI & Development, IBM, Aug 2024
- Agile Project Management, IBM, Sept 2024
- Machine Learning with Python, IBM, Sept 2024
- Python Project for Data Engineering, IBM, Sept 2024
- Python Project for Data Science, IBM, Sept 2024
- Databases and SQL for Data Science with Python, IBM, July 2024
- 2024 Tableau Certified Data Analyst Training, Udemy, July 2024
- Data Engineering Capstone Project, IBM, Oct 2024

• **Language :** Bahasa Indonesia (Native) | English (Proficient)

LEADERSHIP EXPERIENCE

Biomedical Engineering Student Association (HMTB)

Mar 2023 - April 2024

Chairman

- Earned 92.19% on the Garis Besar Haluan Kerja (GBHK) assessment, showcasing excellence in solidarity (95.22%), integrity (89.77%), and professionalism (91.09%).
- Handled HMTB, which is comprised of 63 active members, and more than 120 Biomedical Engineering ITS active students.
- Collaborated with 41 student association leaders from each department and 8 faculty executive leaders at ITS

Biomedical Engineering Annual Contest ITS

Sept - Nov 2022

Head of the BENMAX Event Subdivision

- Coordinated with the Head of the event in managing the division and conceptualizing the olympiad, which comprises 11 staff members.
- Directed the BENMAX webinar on the theme of "Gen-Z Movement For The Brighter Healthcare".
- Assessed an evaluation function for both expert staff and general staff members.