Muammar Nurdin

Home

PORTOFOLIO

Data Analyst

BY Muammar Nurdin

01

2025

About Me

An aspiring data analysis professional dedicated to bridging theoretical knowledge with real-world experience. My goal is to assist stakeholders in making accurate and informed business decisions through insights derived from data analysis. By leveraging data analysis, I aim to identify challenges faced by stakeholders, enabling them to develop forward-looking insights to find solutions and achieve optimal profitability.

I am actively expanding my knowledge and understanding of data processing and presenting it through clear and accessible visualizations. Additionally, my involvement in various organizational activities has strengthened my teamwork and communication skills.

With strong critical thinking abilities and a commitment to continuous learning, I am passionate about building a career in data science, business analytics, and spatial statistics, particularly in the technology sector. I believe data is the key to driving innovation and efficiency.

Contact

muammarnurdin28@gmail.com
linkedin.muammarnurdin

EXPERIENCE

Data Scientist Project Based Virtual Intern
At Home Credit Indonesia x Rakamin Academy
Jan 2025 - Present

Junior Field Researcher
At Institute for Statistics and Socio-Ecological Development
Juni 2024 - Des 2024

Junior Field Researcher
At | International Centre for Aceh and Indian Ocean Studies
Juni 2024 - Des 2024

Intership
At Aceh Province Office of Women's Empowerment and Child Protection
Juni 2022 - Juli 2022

Laboratory Assistant
At FMIPA Syiah Kuala University
Juni 2024 - Des 2024

EDUCATION

Universitas Syiah Kuala
Statistics Student
2020 - 2024

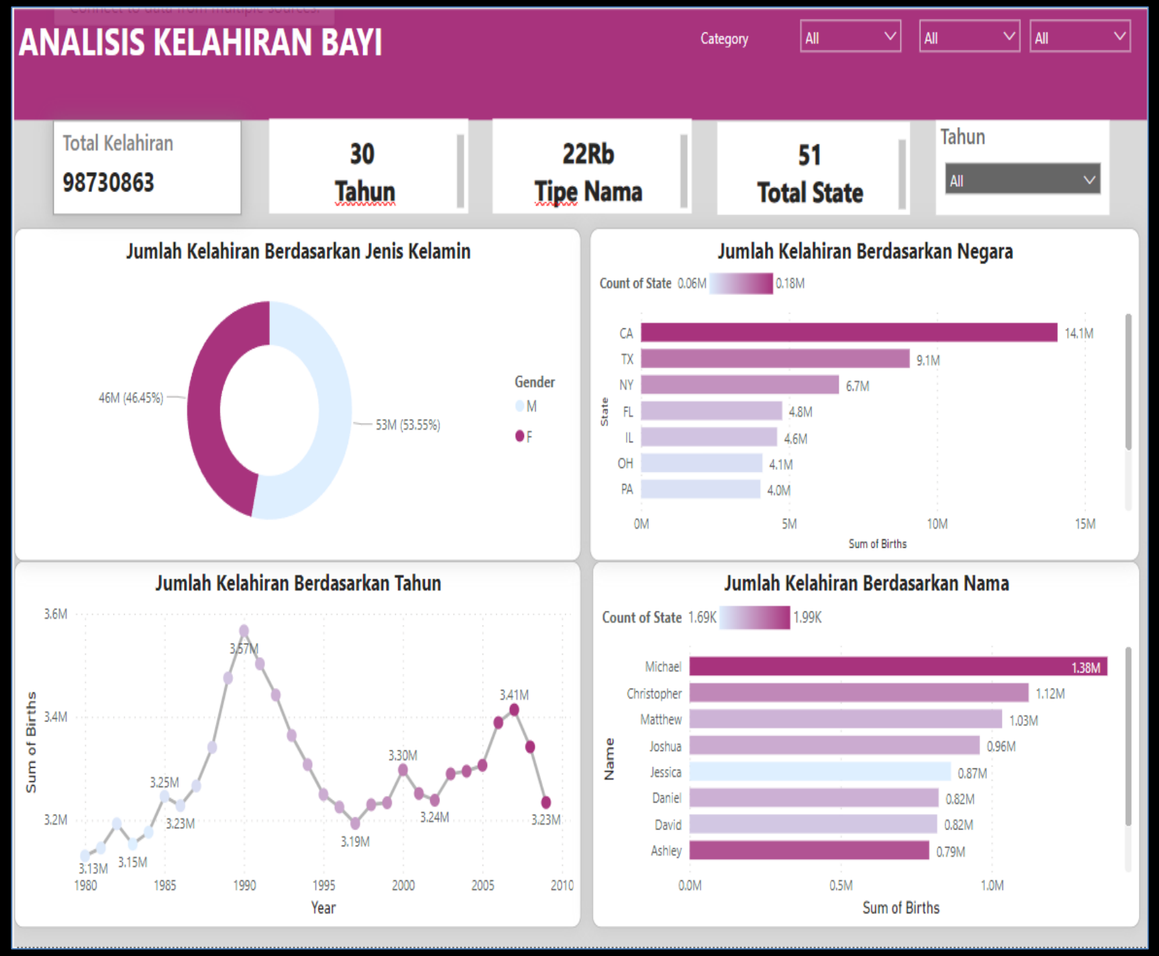
TOOLS

01 PROJECT

Project – Data Analitik Courses

Tableau Dashboard x Kaggle Datsets

Dashboard Data Analitik Courses



Insights

Male infant births totaled 53 million, accounting for 53% of total infant births, while female infant births totaled 46 million, representing 46% of total births. The Pacific states recorded the highest number of total births at 14.1 million, followed by the Southern states with 9.1 million births.

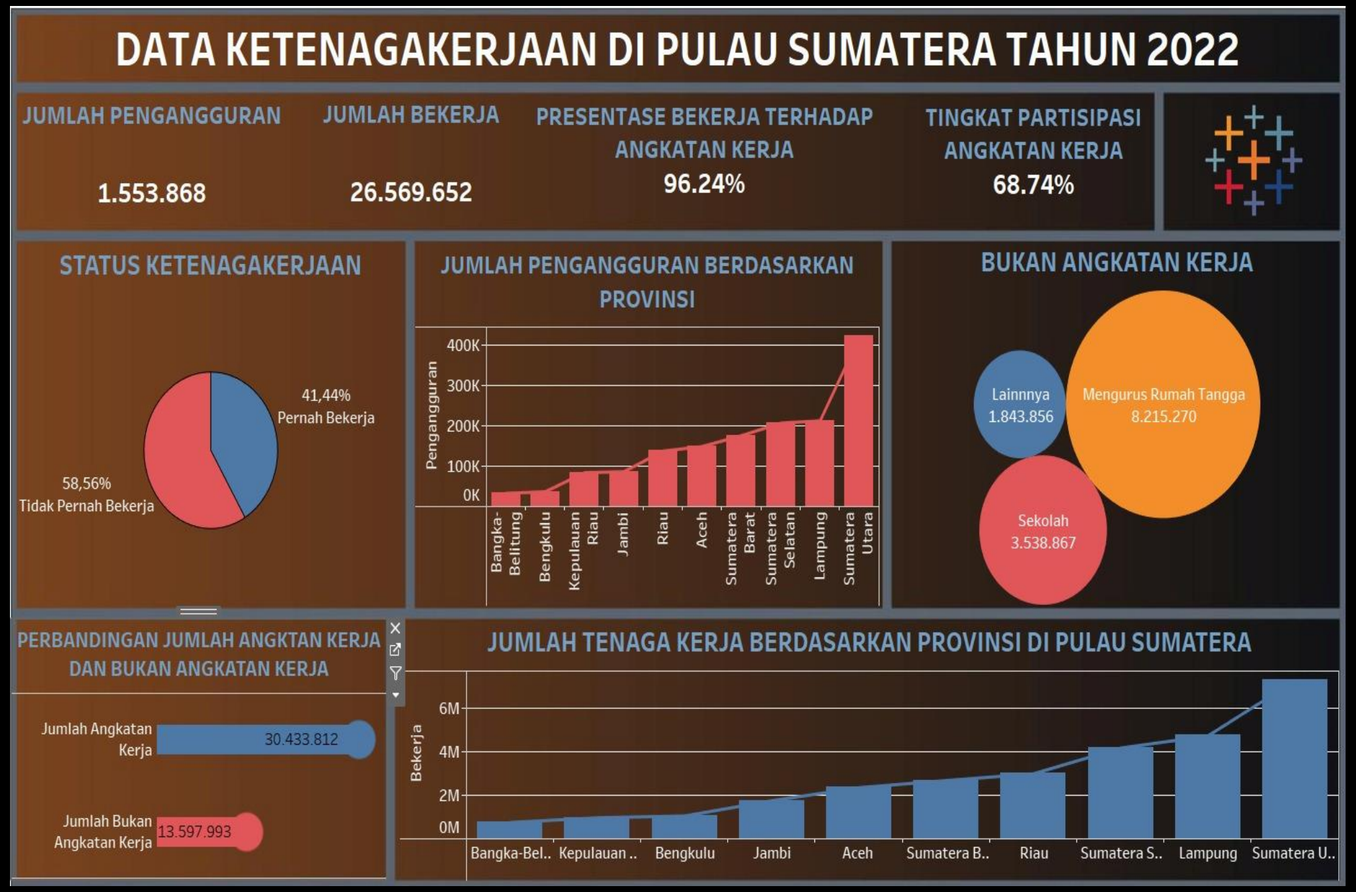
The most popular baby name was Michael, with 1.38 million babies given the name, followed by Christopher with 1.12 million. The highest number of infant births occurred in 1990, with a total of 3.57 million births, while the lowest was recorded in 1980, with 3.13 million births.

02 PROJECT

Employment Data Analysis

Tableau Dashboard x Badan Pusat Statistika

Badan Pusat Statistika to Tableau Dashboard



Insights

The number of unemployed individuals on Sumatra Island was recorded at 1,553,868, while the number of employed individuals reached 26,569,625. In general, provinces with a higher workforce tend to also experience a higher unemployment rate. For instance, North Sumatra has a large workforce but also a significant level of unemployment. In contrast, provinces such as Bangka Belitung and Bengkulu, despite having smaller workforces, exhibit lower unemployment rates.

03 PROJECT

Final project on Analysis of Stunting Data Using Geographically Weighted Panel Regression

RStudio x QGIS x BkkbN Portal

BkkbN Portal to Rstudio and QGIS

```
> #hitung
> tX1.1 = hasil.gwpr$SDF$X1/hasil.gwpr$SDF$X1_SE
> tX1.1
 [1] 1.4410997 0.9248516 2.7215509 2.5768615 1.4394655 1.6707609 1.7717172 1.3117359 1.7316653 1.4988214 1.7537137
[12] 2.8045846 1.4634067 2.2655091 1.3862916 1.6999753 2.0206780 0.4388580 2.6613658 2.5075805 2.8256448 0.9219290
[23] 1.7515334 1.4410997 0.9248516 2.7215509 2.5768615 1.4394655 1.6707609 1.7717172 1.3117359 1.7316653 1.4988214
[34] 1.7537137 2.8045846 1.4634067 2.2655091 1.3862916 1.6999753 2.0206780 0.4388580 2.6613658 2.5075805 2.8256448
[45] 0.9219290 1.7515334
> tX1.2 = hasil.gwpr$SDF$X2/hasil.gwpr$SDF$X2_SE
> tX1.2
 [1] 4.152230 3.525358 3.941090 4.035432 3.196237 2.845659 2.786886 3.767206 2.965967 2.773576 3.475184 3.857593
[13] 3.775163 3.957928 3.238415 2.767373 3.741580 3.973312 3.976638 4.047556 3.831737 2.991626 2.843837 4.152230
[25] 3.525358 3.941090 4.035432 3.196237 2.845659 2.786886 3.767206 2.965967 2.773576 3.475184 3.857593 3.775163
[37] 3.957928 3.238415 2.767373 3.741580 3.973312 3.976638 4.047556 3.831737 2.991626 2.843837
> tX1.4 = hasil.gwpr$SDF$X4/hasil.gwpr$SDF$X4_SE
> tX1.4
 [1] 6.905781 5.561164 6.036944 6.112799 5.021038 4.509622 4.861869 6.560188 4.849807 5.147797 6.230196 5.881581
[13] 6.591286 6.575541 5.273170 4.886844 6.517826 6.685530 6.177267 6.381695 5.869581 4.214687 4.577960 6.905781
[25] 5.561164 6.036944 6.112799 5.021038 4.509622 4.861869 6.560188 4.849807 5.147797 6.230196 5.881581 6.591286
[37] 6.575541 5.273170 4.886844 6.517826 6.685530 6.177267 6.381695 5.869581 4.214687 4.577960
> tX1.6 = hasil.gwpr$SDF$X6/hasil.gwpr$SDF$X6_SE
> tX1.6
 [1] -3.938060 -3.857111 -2.658525 -2.803923 -3.351569 -2.959942 -2.809848 -3.762260 -3.007801 -2.845488 -3.219706
[12] -2.486018 -3.673955 -3.216435 -3.356189 -2.814440 -3.243983 -4.437193 -2.789144 -3.021814 -2.457046 -3.044152
[23] -2.921985 -3.938060 -3.857111 -2.658525 -2.803923 -3.351569 -2.959942 -2.809848 -3.762260 -3.007801 -2.845488
[34] -3.219706 -2.486018 -3.673955 -3.216435 -3.356189 -2.814440 -3.243983 -4.437193 -2.789144 -3.021814 -2.457046
[45] -3.044152 -2.921985
> tX1.7 = hasil.gwpr$SDF$X7/hasil.gwpr$SDF$X7_SE
> tX1.7
 [1] 2.031478 2.474274 1.542689 1.576864 2.085829 1.564477 2.141795 2.281746 2.010012 2.200811 2.234837 1.442966
[13] 2.245398 1.970656 2.364623 2.172678 2.124637 2.342608 1.643126 1.770582 1.440500 1.635918 1.671003 2.031478
[25] 2.474274 1.542689 1.576864 2.085829 1.564477 2.141795 2.281746 2.010012 2.200811 2.234837 1.442966 2.245398
[37] 1.970656 2.364623 2.172678 2.124637 2.342608 1.643126 1.770582 1.440500 1.635918 1.671003
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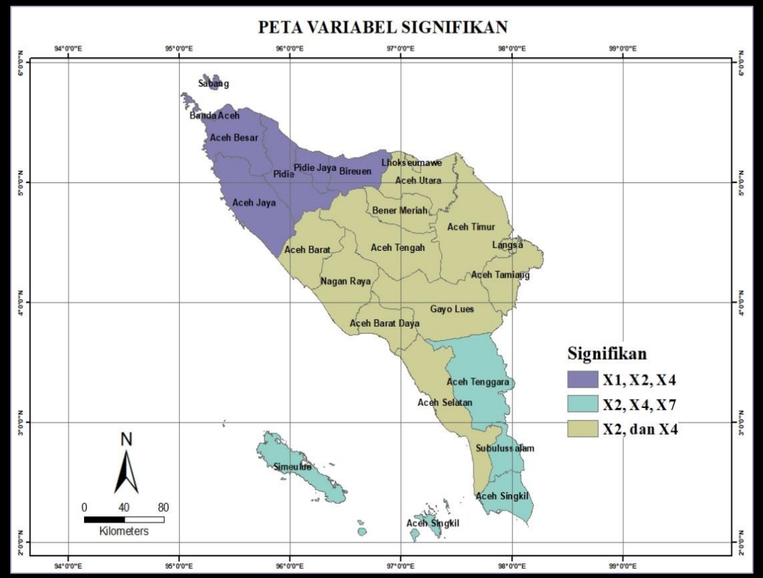


```
************************************************************************
*           Results of Geographically Weighted Regression              *
************************************************************************

*********************Model calibration information*********************
Kernel function: bisquare
Adaptive bandwidth: 44 (number of nearest neighbours)
Regression points: the same locations as observations are used.
Distance metric: Euclidean distance metric is used.

****************Summary of GWR coefficient estimates:******************
                Min.     1st Qu.      Median     3rd Qu.      Max.
Intercept -1235.33492 -1051.59121 -1031.38559  -470.11362 317.0969
X1            0.20554     0.59973     0.78471     0.91265   1.0075
X2            0.67559     0.73920     0.76775     0.79620   0.9852
X4            1.04131     1.09855     1.14529     1.20201   1.4397
X6           -0.69778    -0.50372    -0.43661    -0.39498  -0.3312
X7            0.10831     0.12302     0.14719     0.16162   0.1866
************************Diagnostic information*************************
Number of data points: 46
Effective number of parameters (2trace(S) - trace(S'S)): 12.20782
Effective degrees of freedom (n-2trace(S) + trace(S'S)): 33.79218
AICc (GWR book, Fotheringham, et al. 2002, p. 61, eq 2.33): 896.7586
AIC (GWR book, Fotheringham, et al. 2002,GWR p. 96, eq. 4.22): 876.9281
BIC (GWR book, Fotheringham, et al. 2002,GWR p. 61, eq. 2.34): 859.2866
Residual sum of squares: 411975245
R-square value:  0.8834607
Adjusted R-square value:  0.8400757

************************************************************************
Program stops at: 2024-08-15 10:45:12.265817
```

Insights

The dominant variables affecting the number of families at risk of stunting vary across districts/cities in Aceh Province, based on analysis using the GWPR method. The variables of the number of families without proper latrines and the number of families with wives aged 35-40 years have an impact across all regions of Aceh Province, whereas the variable of the number of families with more than two children has no effect in any region of Aceh Province.

04 PROJECT

Infographic of Village Population Data

Excel x QGIS x Canva

Excel and QGIS to Canva

Insights

Lhok Gajah Village has a population primarily of working age, with the highest level of education averaging junior high school or its equivalent. The agricultural sector is the main source of livelihood for the village community.

Muammar Nurdin

Thank You

FOR THE OPPORTUNITY

2025