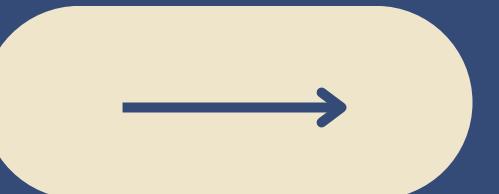


DANIEL'S Portfolio

2024-2025



DANIEL RIZAL ALONSO



MATHEMATICS

get to know me!

As an international class mathematics student at State University of Surabaya, I have a strong foundation in mathematical theory and data analysis. I am passionate about applying analytical thinking to real-world problems, both in academic settings and beyond. This portfolio is my very first, showcasing my experiences both on and off campus — from academic projects to extracurricular involvement. Through this collection, I aim to reflect my growth, curiosity, and commitment to learning and applying mathematics in diverse contexts.



linkedin.com/in/daniel-alonso-b934a22b4



instagram.com/danielkni



education

STATE UNIVERSITY OF SURABAYA
MATHEMATICS (GPA 3.89/4.00)

2023-
NOW

STATE SHS 13 OF SURABAYA
NATURAL SCIENCE

2020-
2023

experience

CALCULUS THEORY CO-TEACHER

2024

MAG-D ITB CONTEST PARTICIPANTS

2025

software skills



MICROSOFT WORD



MICROSOFT EXCEL



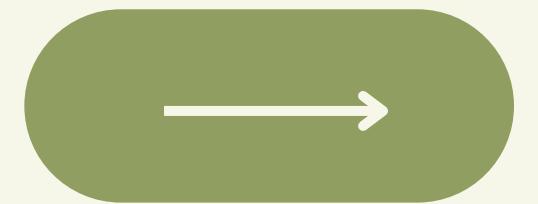
SPSS



PYTHON



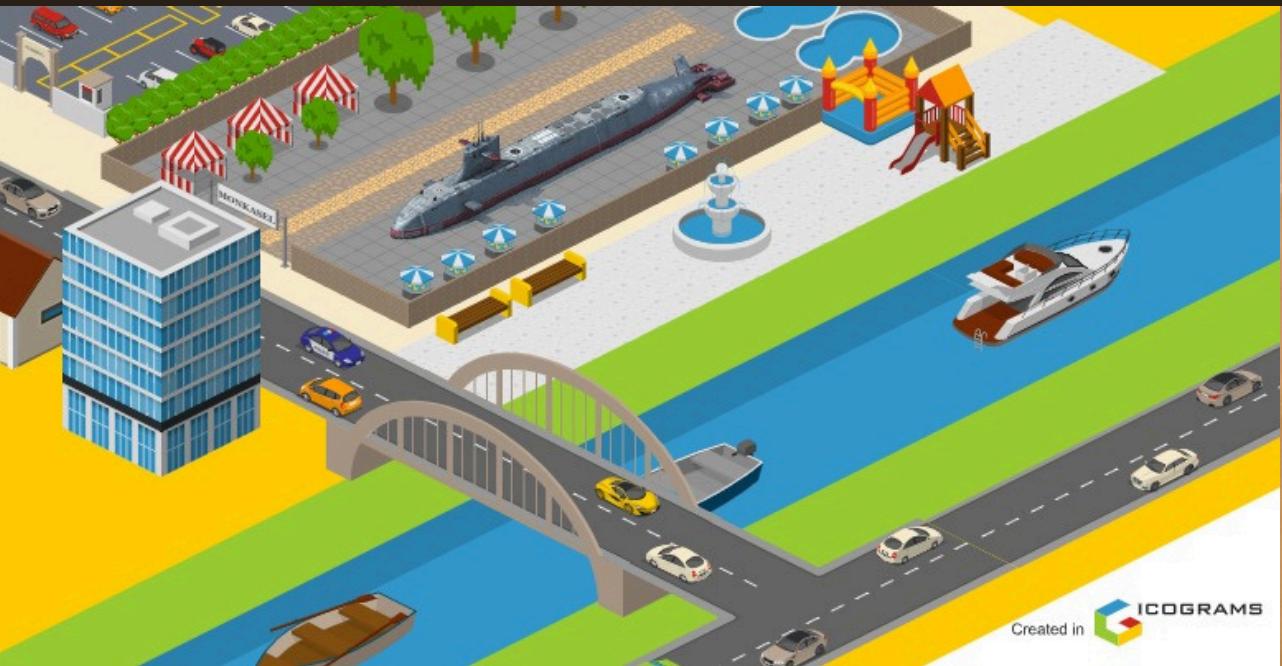
Projects



3D project geometry

24.11.2024

Creating a 3D map of Surabaya city tourism using the Icograms website. My team received a good evaluation from the Geometry Lecturer.



Analytic Hierarchy Process Project

17.12.2024

making comparisons of the most popular types of motorcycles in the UNESA area based on questionnaires and using the AHP method

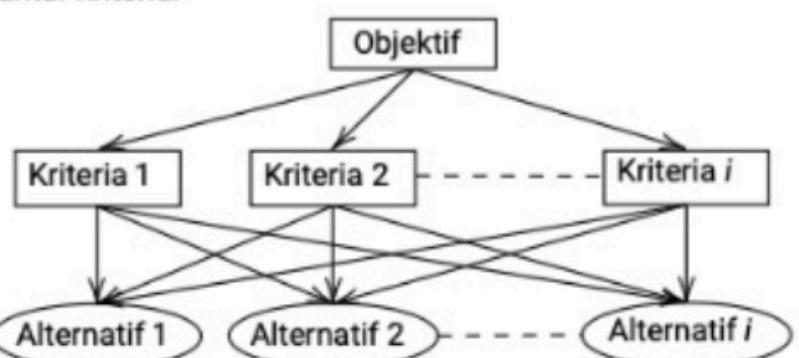


A	1	2,192784	1,295485	1,581317	0,349609	0,450267	0,282048	0,333813	1,415737	0,353934	
B	0,456041	1	1,404667	1,03598	0,159436	0,20534	0,305819	0,218693	0,889288	0,222322	
C	0,771912	0,711913	1	1,119838	0,269867	0,146184	0,217716	0,236396	0,870163	0,217541	
D	0,632384	0,965269	0,892986	1	0,221087	0,198209	0,194417	0,211098	0,824811	0,206203	
jumlah	2,860337	4,869966	4,593138	4,737135						1	
		lamda max 4,071078									
		CI 0,023693									
		CR 0,026325									
31	Performa	A	B	C	D	nilai eigen	jumlah	rata-rata			
32	A	1	1,914314	1,043146	1,235373	0,303906	0,372297	0,264726	0,284182	1,225111	0,306278
33	B	0,52238	1	1,175562	0,726251	0,158755	0,19448	0,29833	0,167065	0,81863	0,204658
34	C	0,958638	0,850657	1	1,385488	0,291336	0,165436	0,253776	0,318714	1,029263	0,257316
35	D	0,809472	1,376934	0,721768	1	0,246003	0,267787	0,183168	0,230038	0,926996	0,231749
36	jumlah	3,290491	5,141905	3,940476	4,347112					1	
37		lamda max 4,081519									
38		CI 0,027173									
39		CR 0,030192									
40	PERANGKINGAN					0,277045					
41	Beat	0,30509				0,245163					
42	Scoopy	0,223438				0,173825					
43	Vario	0,251324				0,303967					

```
C: > Users > Daniel Rizal Alonso > Downloads > TA Komput.py > ...
  5 def get_pairwise_comparison_matrix():
  6     pairwise_matrix = []
  7     pairwise_matrix.append(row)
  8     pairwise_matrix = np.array(pairwise_matrix)
  9     print("Matriks Perbandingan Berpasangan:")
 10    print(pairwise_matrix)
 11    return pairwise_matrix, n
 12
 13
 14
 15
 16
 17
 18 # Fungsi untuk menghitung bobot kriteria dengan eigenvector
 19 def calculate_eigenvector_weights(pairwise_matrix):
 20     eig_values, eig_vectors = eig(pairwise_matrix)
 21     max_eig_index = np.argmax(eig_values)
 22     eig_vector = eig_vectors[:, max_eig_index]
 23     weights = eig_vector / eig_vector.sum()
 24     return weights.real
 25
 26 # Fungsi untuk menghitung nilai eigen maksimum
 27
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```

Analytical Hierarchy Process I

- ▶ Analytical Hierarchy Process (AHP) adalah metode yang digunakan dalam analisis pengambilan keputusan
- ▶ Dengan kata lain, AHP adalah metode untuk menurunkan skala rasio dari perbandingan antar kriteria.



Skala rasio diturunkan adri prinsip vektor eigen

Sorting & Searching Project

05.06.2025

Creating a booking website that contains static data structures, sorting, and searching algorithms. My group used Python as the project language.



Pengaturan Pesanan

Pilih Lokasi Toko: Cabang Manyar

Detail Pembeli

Nama Pembeli: Cravuu

Pelanggan Prioritas (VIP/Member)

Bersihkan Keranjang

Cravee Ordering System

Manisnya Kaya Kamu! ❤️

Cari dan Tampilkan Menu Kue

Cari Kue:

Urutkan Berdasarkan: Nama

Tampilan Menu

No	Nama Kue	Harga	Stok
1	Cheesetiny	Rp88,000	4
2	Cheesetiny 10 cm	Rp35,200	3
3	Cheesetiny 16 cm	Rp110,000	9
4	Cheesetiny Bites	Rp44,000	8
5	ChocoChunk Magic	Rp96,000	8
6	ChocoChunk Magic 10 cm	Rp38,400	7
7	ChocoChunk Magic 16 cm	Rp120,000	2
8	ChocoChunk Magic Bites	Rp48,000	5
9	Matcha Mochi	Rp90,000	12

Get in Touch



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