



**UNIVERSITAS BUMIGORA MATARAM
PROGRAMMING COMMUNITY**

Jalan Ismail Marzuki No. 22, Cilinaya, Cakranegara, Kota Mataram,
Nusa Tenggara Barat

Email: ProgrammingCommunityubg@gmail.com



Mataram, 12 Desember 2022

No : 036/UKM-PC/XII/2022
Hal : Undangan Narasumber
Lampiran : 1

Yth, Bapak Haerani S.Kom., M.Eng.
di Tempat

Assalamualaikum Warrohmatullahi Wabarokaatuh

Dengan hormat,
Sehubung akan diadakannya kegiatan **One Day Informatic X PC Challenge Unit Kegiatan Mahasiswa Programming Community** Universitas Bumigora dengan tema “Develop Solutions For Local Community, To Be Extraordinary Student”, maka kami bermaksud mengundang Bapak untuk mengisi acara sebagai Narasumber materi Data Sciences yang akan kami adakan pada:

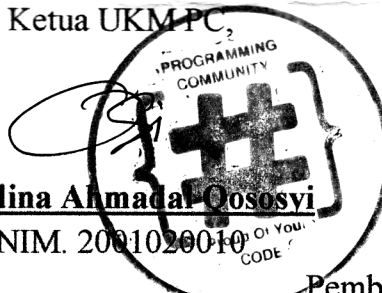
Hari, tanggal : Minggu, 25 Desember 2022
Waktu : 08:00 Wita – Selesai
Tempat : Ruang Aula 3 Universitas Bumigora

Demikian undangan ini kami sampaikan, atas perhatiannya kami Unit Kegiatan Mahasiswa Programming Community (UKM PC) mengucapkan terima kasih.

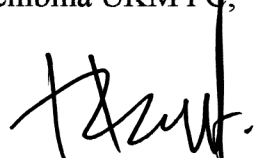
Mengetahui,

Unit Kegiatan Mahasiswa Programming Community
Universitas Bumigora Mataram

Ketua UKM PC,


Sayidina Ahmad Qososyi
NIM. 2001020010

Pembina UKM PG,


Rifqi Hammad M. Kom
NIK. 20.6.376

Ketua Panitia,


Aldi Pra Febrian
NIM. 2201010204

LAMPIRAN 1.**RUNDOWN ACARA ONE DAY INFORMATIC**

Minggu, 25 Desember 2022

waktu	Pokok kegiatan	Penanggung jawab
Pra Acara		
07 : 00	Panitia dilokasi	Panitia
07 : 00 – 08:00	Persiapan Panitia	Panitia
08 : 00 -08 : 15	Registrasi Peserta	Panitia Acara + UKM Musik
Acara		
08 : 15 – 08 :45	Pembukaan	MC (Dinda & Herlan)
08 : 45 – 08 : 55	Menyanyikan lagu Indonesia Raya	Dirgen Cici
08 : 55 – 09 : 00	Doa	Lalu Wahyu Saputra
09 : 00 – 09 : 10	Laporan Ketua Panitia	Ketua Panitia Aldi Pra Febrian
09 : 10 – 09 : 20	Sambutan Ketua PC/GDSC	Sayidina Ahmadal Qososyi
09 : 20 – 09 : 30	Sambutan Pembina GDSC	Ibu Kartarina S.Kom M.Kom
09 : 30 – 09 : 40	Sambutan Pembina PC	Pak Rifqi Hammad M.Kom
09 : 40 – 09 : 50	Sambutan dari pihak kampus sekaligus Pembuka Acara	WR 3 I Made Yadi Dharma S.Kom.,M.Kom.
09 : 50 – 10 : 20	Coffe Break	MC & UKM Musik
10 : 20 – 10 : 35	Pengumuman Lomba Bebras	MC
10 : 35 – 11 : 10	Pemateri 1 Data Science	Pak Haerani S.Kom., M.Eng.
11 : 10 – 11 : 50	Pemateri 2 Flutter	Kak Ziad Alfian
11 : 50 – 12 : 05	Kuis Berhadiah	MC
12 : 05 – 12 : 50	Showcase Project (PC Platform)	Panitia
12 : 35 – 13 : 00	Live Music + Break	UKM Music + Panitia
13 : 00 – 13 : 20	Pengumuman Juara PC Challenge & Pembagian Hadiah	Panitia
13.20 Selesai	Penutup & Foto Bersama	MC

One Day Informatics

X PC Challenge



Develop Solutions for Local Community
To Be Extraordinary Student



The role of Data Science in building solutions for local problem.

Hairani, S.Kom., M.Eng

Lecture at Bumigora University



How to develop products that have an impact on local problems with flutter

Muhammad ziad alfian

Mobile Developer

Fee Registration 15k

15k

Vanue

Aula 3 Universitas Bumigora Mataram

Sabtu 24 Desember (PC Challenge)

15:00PM - 17:00PM

Minggu 25 Desember (One Day Informatics)

08:30 AM - Selesai

RSVP NOW



SCAN ME

Contact person

+6287859909669 (Rian)

Collaboration & Media Partner



Sponsorship



The Role of Data Science in Building Solutions for Local Problem

Hairani, M.Eng.

Minggu, 25 Desember 2022



Profile



Educational Background

S1 Informatika, **Universitas Islam Indonesia**
S2 Teknik Elektro, **Universitas Gadjah Mada**

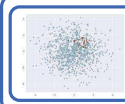
Areas of Expertise



Machine and Deep Learning



Data Science

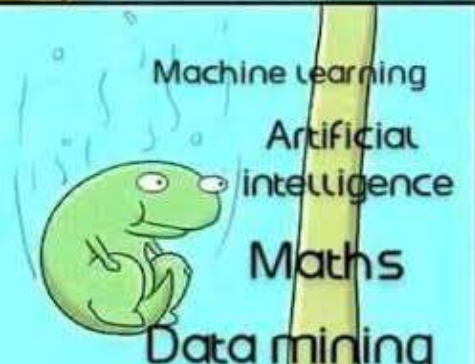
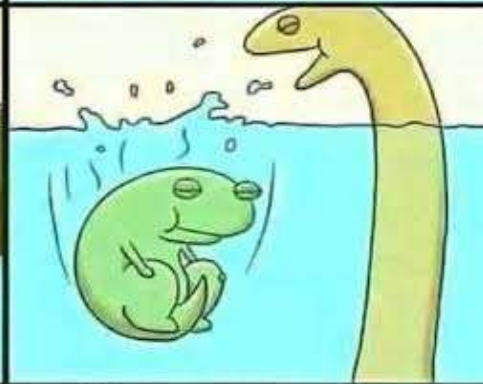
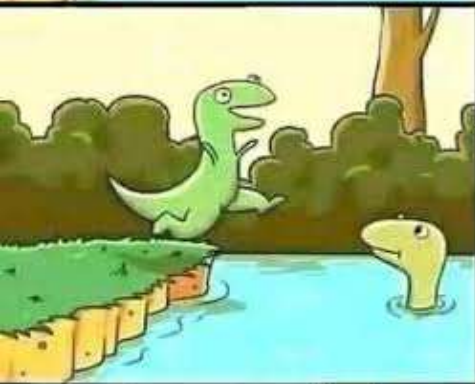
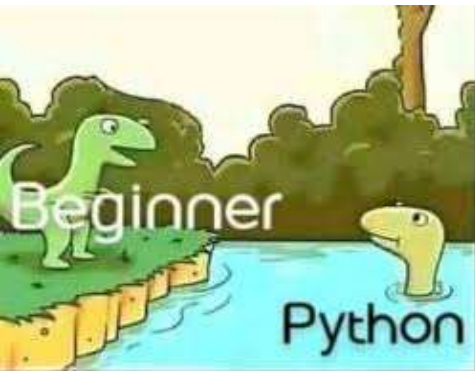


Class Imbalance Research

Skills



Hairani, S.Kom., M.Eng.



JAN
2022

OVERVIEW OF SOCIAL MEDIA USE

HEADLINES FOR SOCIAL MEDIA ADOPTION AND USE [NOTE: USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS]

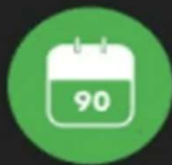


NUMBER OF SOCIAL
MEDIA USERS



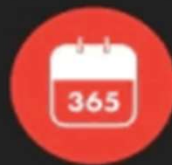
4.62
BILLION

QUARTER-ON-QUARTER
CHANGE IN SOCIAL MEDIA USERS



+1.7%
+77 MILLION

YEAR-ON-YEAR CHANGE
IN SOCIAL MEDIA USERS



+10.1%
+424 MILLION

AVERAGE DAILY TIME SPENT
USING SOCIAL MEDIA



2H 27M
+1.4% (+2M)

AVERAGE NUMBER OF SOCIAL
PLATFORMS USED EACH MONTH



7.5

SOCIAL MEDIA USERS
vs. TOTAL POPULATION



58.4%

SOCIAL MEDIA USERS
vs. POPULATION AGE 13+



74.8%

SOCIAL MEDIA USERS
vs. TOTAL INTERNET USERS



93.4%

FEMALE SOCIAL MEDIA USERS
vs. TOTAL SOCIAL MEDIA USERS



46.1%

MALE SOCIAL MEDIA USERS
vs. TOTAL SOCIAL MEDIA USERS



53.9%

SOURCES: KEPIOS ANALYSIS; COMPANY ADVERTISING RESOURCES AND ANNOUNCEMENTS; CNNIC, TECHRASA, OGDH, U.N., U.S. CENSUS BUREAU. DATA FOR TIME SPENT AND AVERAGE NUMBER OF PLATFORMS: GWI (Q3 2021). SEE GWI.COM FOR MORE DETAILS. **NOTE:** AVERAGE PLATFORMS REQUIRE INCLUDES DATA FOR YOUTUBE. **ADVISORY:** SOCIAL MEDIA USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. FIGURES FOR REACH vs. POPULATION AND REACH vs. INTERNET USERS MAY EXCEED 100% DUE TO DUPLICATE AND FAKE ACCOUNTS, DELAYS IN DATA REPORTING, AND DIFFERENCES BETWEEN CENSUS COUNTS AND RESIDENT POPULATIONS.



What is Data Science ??

- Data Science → the **scientific exploration** of **data** to extract meaning or insight, and the **construction** of software system to utilize such insight in a business context



Artificial Intelligence (AI)

Human Intelligence Exhibited by Machines

Amazon purchase prediction Smart Email Categorization

Machine Learning (ML)

An Approach to Achieve Artificial Intelligence

Google Maps speed of traffic Facebook facial recognition
Netflix video recommendation

Deep Learning (DL)

A Technique for Implementing Machine Learning

Self-Driving Cars
Speech Recognition Robotics

Data Science

Scientific methods, algorithms and systems to extract knowledge or insights from big data

Data Analysis

Process of inspecting, cleansing, transforming and modeling data

Data Analytics

Discovery, interpretation, and communication of meaningful patterns in data

Data Mining

1950's 1980's 2010's

Big Data



Data Science Jobs

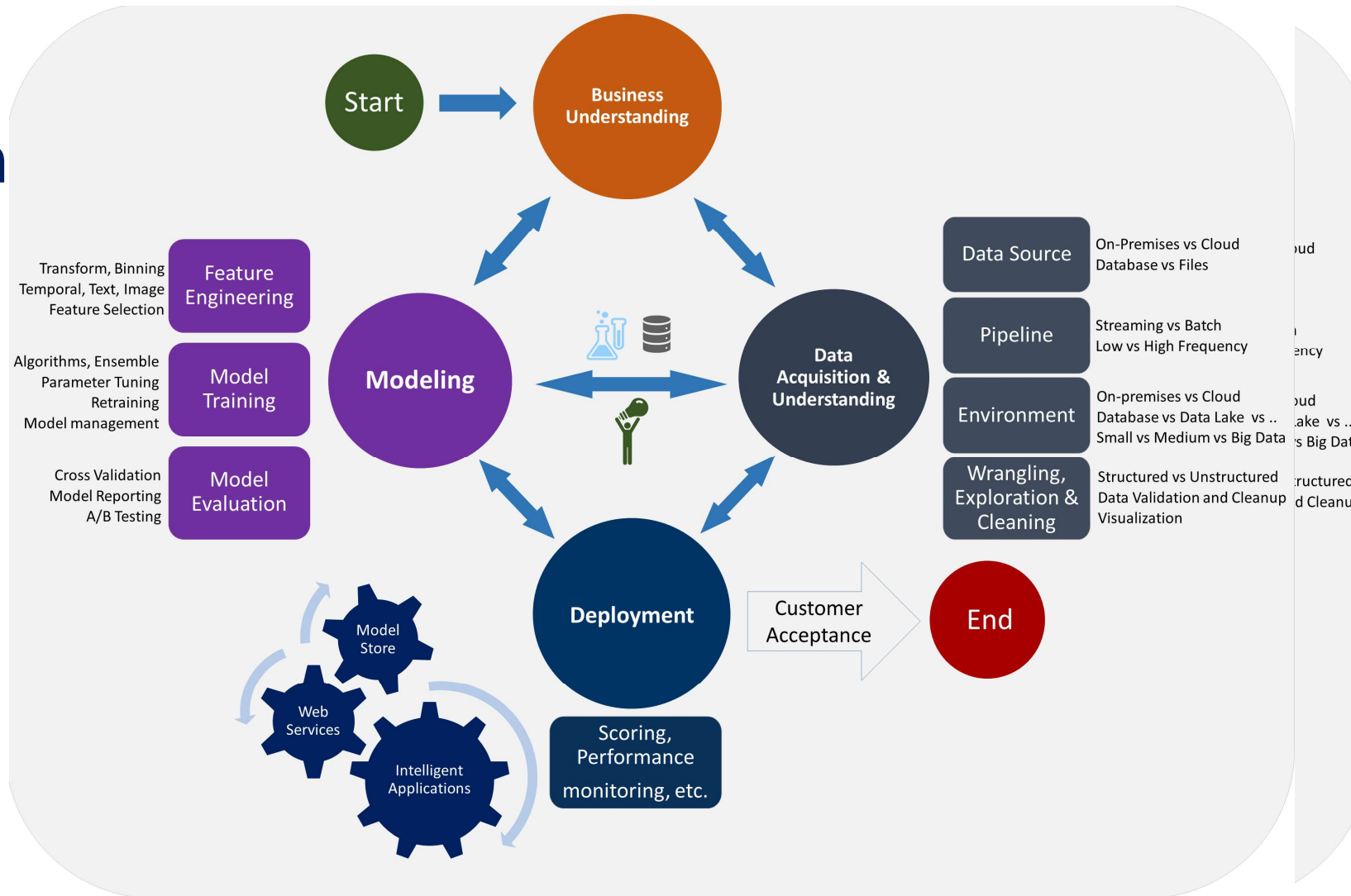


Data Science Skills

	DATA SCIENTIST	DATA ANALYST	DATA ENGINEER	BI DEVELOPER
Mathematics	★★★★★	★★★★	★★	★★★
Statistics	★★★★★	★★★★★	★★	★★★
Python	★★★★★	★★	★★★★★	★
R	★★★★★	★★	★★	★
Hadoop	★★★★	★	★★★★★	★
Tableau	★★★★	★★★★★	★	★★★★
Data Cleaning	★★★★★	★★★★★	★★	★★
Data Wrangling	★★★★★	★★★★★	★★	★★
Machine Learning	★★★★★	★★★★★	★★	★★
Algorithms	★★★★★	★★★	★★★	★
Business Acumen	★★★★★	★★★★★	★★	★★★★
Cloud Computing	★★★★	★★★	★★★★★	★
Database Management	★★★★	★★★	★★	★
Data Modelling	★★★★★	★★★★	★★★	★★
Notebook	★★	★★	★★	★
Familiarity with GPUs	★★★★	★★★★	★★★	★★



Data Science Lifecycle

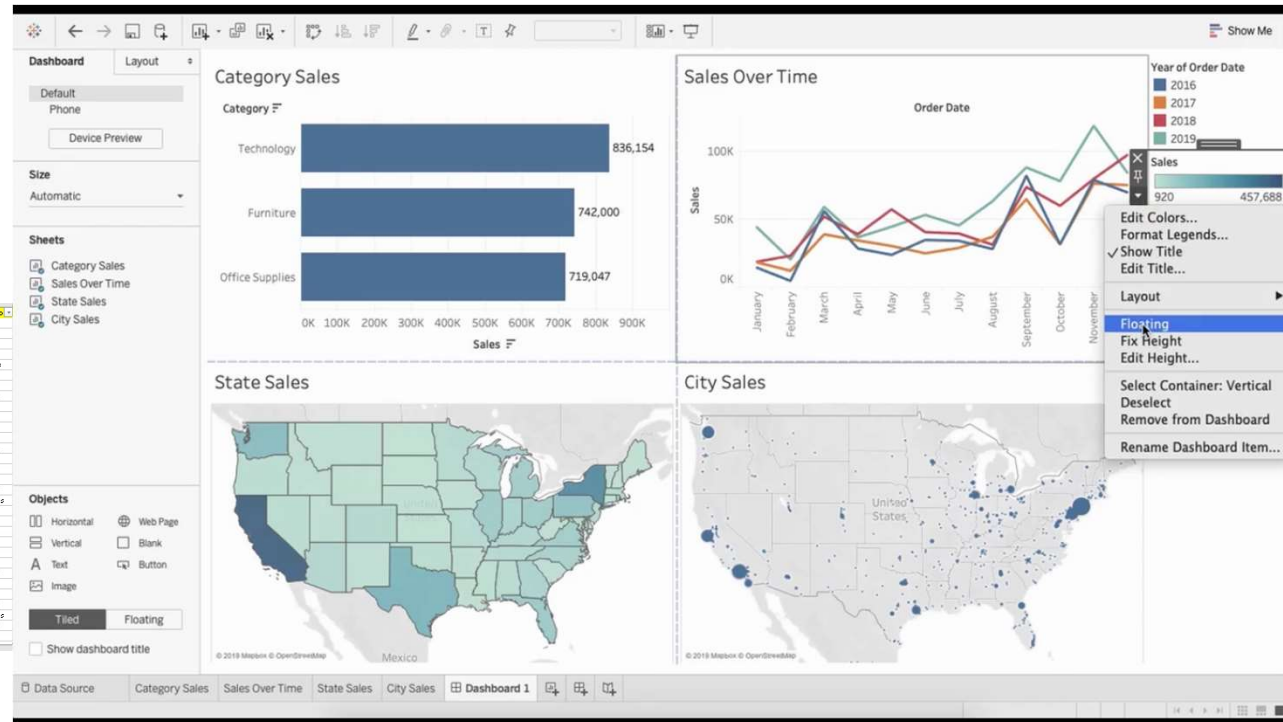


10 Algorithms Data Science



Visualization Data

order_id	order_date	ship_date	customer_name	segment	status	country	market	region	product_id	category	sub_category	
AG-2011-2040	1/12/2011	1/6/2011	Standard Cls: Toby Bramhardt	Consumer	Completed	Constantine	Algeria	Africa	OFF-TEN-10000002	Office Supplies	Storage	
IN-2011-47853	1/12/2011	1/12/2011	Standard Cls: Joseph Holt	Consumer	Completed	New South Wales	Australia	APAC	OFF-SU-10000698	Office Supplies	Supplies	
HU-2011-1220	1/12/2011	1/12/2011	Second Class: Anik Thomas	Consumer	Completed	Budapest	Hungary	EMEA	OFF-TEN-10001931	Office Supplies	Storage	
IT-2011-344163	1/12/2011	1/12/2011	Second Class: Eugenio Moraes	Home Office	Completed	Stockholm	Sweden	EU	OFF-PA-10001432	Office Supplies	Paper	
IN-2011-47853	1/12/2011	1/12/2011	Standard Cls: Joseph Holt	Consumer	Completed	New South Wales	Australia	APAC	FUR-FU-10003443	Furniture	Furniture	
IN-2011-47893	1/12/2011	1/12/2011	Standard Cls: Joseph Holt	Consumer	Completed	New South Wales	Australia	APAC	OFF-PA-10001968	Office Supplies	Paper	
CA-2011-1910	1/12/2011	1/6/2011	Standard Cls: Magdalena Morze	Consumer	Completed	Ontario	Canada	TEC-OK-10002170	Technology	Multimedia		
IN-2011-73337	1/12/2011	1/12/2011	Same Day: Kean Ngwee	Corporate	Completed	New South Wales	Australia	APAC	OFF-AB-10000304	Office Supplies	Appliances	
ID-2011-80230	1/12/2011	1/12/2011	Standard Cls: Ken Loondale	Consumer	Completed	Auckland	New Zealand	APAC	TEC-CD-10004182	Technology	Copiers	
ID-2011-46690	1/12/2011	1/12/2011	Standard Cls: Lindsey Williams	Corporate	Completed	Minoro	Italy	EMEA	FUR-NOV-10002071	Furniture	Chairs	
IN-2011-65193	1/12/2011	1/12/2011	Second Class: Larry Blukas	Consumer	Completed	National Capital	Philippines	APAC	OFF-ST-10000320	Office Supplies	Storage	
IN-2011-65193	1/12/2011	1/12/2011	Second Class: Larry Blukas	Consumer	Completed	National Capital	Philippines	APAC	South East Asi	Furniture	Tables	
ES-2011-46636	1/12/2011	1/12/2011	Standard Cls: Dorothy Dickinson	Consumer	Completed	England	United Kingdom	EU	FUR-BO-10000122	Furniture	Bookcases	
IN-2011-23652	1/12/2011	1/12/2011	Standard Cls: Diana Pardo	Home Office	Completed	Sarawak	Malaysia	APAC	TEC-CD-10000334	Technology	Copiers	
ID-2011-80230	1/12/2011	1/12/2011	Standard Cls: Ken Loondale	Consumer	Completed	Auckland	New Zealand	APAC	TEC-CH-10000214	Technology	Chairs	
MX-2011-96223	1/12/2011	1/12/2011	Standard Cls: Stewart Williams	Consumer	Completed	Quatemala	Guatemala	LATAM	TEC-PR-10000241	Technology	Phones	
IN-2011-710	1/12/2011	1/12/2011	Standard Cls: Jas O'Carroll	Consumer	Completed	Yazd	Iran	EMEA	OFF-BRE-10000261	Office Supplies	Appliances	
ID-2011-80230	1/12/2011	1/12/2011	Standard Cls: Ken Loondale	Consumer	Completed	Auckland	New Zealand	APAC	TEC-AC-10002891	Technology	Accessories	
ID-2011-80230	1/12/2011	1/12/2011	Standard Cls: Ken Loondale	Consumer	Completed	Auckland	New Zealand	APAC	FUR-CH-10000666	Furniture	Chairs	
ID-2011-12556	1/12/2011	1/12/2011	Standard Cls: Chio McAfee	Consumer	Completed	Nakhon Ratchasima	Thailand	APAC	OFF-ST-10002966	Office Supplies	Storage	
IN-2011-73337	1/12/2011	1/12/2011	Same Day: Kean Ngwee	Corporate	Completed	New South Wales	Australia	APAC	OFF-LA-10003336	Office Supplies	Labels	
IN-2011-7630	1/12/2011	1/12/2011	Second Class: Mar Gilpin	Corporate	Completed	Razavi Khorasan	Iran	EMEA	OFF-BC-10000550	Office Supplies	Art	
IN-2011-710	1/12/2011	1/12/2011	Standard Cls: Jas O'Carroll	Consumer	Completed	Yazd	Iran	EMEA	OFF-ROG-10000433	Office Supplies	Storage	
TZ-2011-7370	1/12/2011	1/12/2011	Standard Cls: Jack Gurea	Consumer	Completed	Dar Es Salaam	Tanzania	Africa	OFF-STI-10000385	Office Supplies	Supplies	
ID-2011-46690	1/12/2011	1/12/2011	Standard Cls: Lindsey Williams	Corporate	Completed	Minoro	Italy	EMEA	OFF-CAH-10000463	Office Supplies	Appliances	
IN-2011-710	1/12/2011	1/12/2011	Standard Class: Larry Blukas	Consumer	Completed	National Capital	Philippines	APAC	South East Asi	Office Supplies	Furniture	
IN-2011-710	1/12/2011	1/12/2011	Standard Cls: Jas O'Carroll	Consumer	Completed	Yazd	Iran	EMEA	EMEA	OFF-ADV-10000261	Office Supplies	Furniture
MX-2011-11825	1/12/2011	1/12/2011	Second Class: Russell Applegate	Consumer	Completed	Panama	Brazil	LATAM	FUR-BO-10000148	Furniture	Bookcases	
MX-2011-14264	1/12/2011	1/12/2011	Standard Cls: Myra Herman	Corporate	Completed	Yucatan	Mexico	LATAM	TEC-AC-10001082	Technology	Accessories	
MX-2011-15071	1/12/2011	1/12/2011	Standard Cls: Beth Thompson	Home Office	Completed	Gramos	Cuba	LATAM	OFF-EN-10000070	Office Supplies	Appliances	
ES-2011-45394	1/12/2011	1/12/2011	Standard Cls: Arthur Probst	Consumer	Completed	Rhineland-Palatinate	France	EU	OFF-AB-10001546	Office Supplies	Art	



Data Science Applications

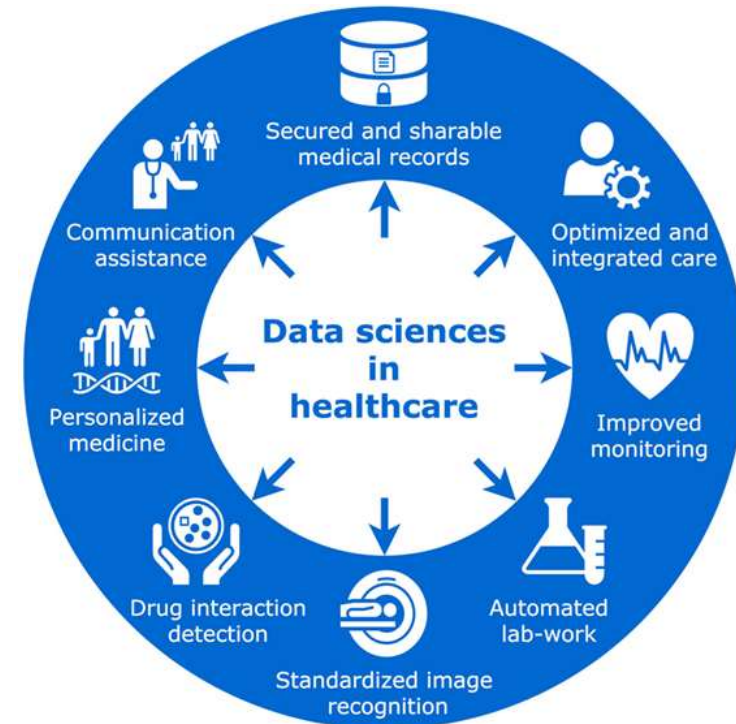
Agriculture



Tourism



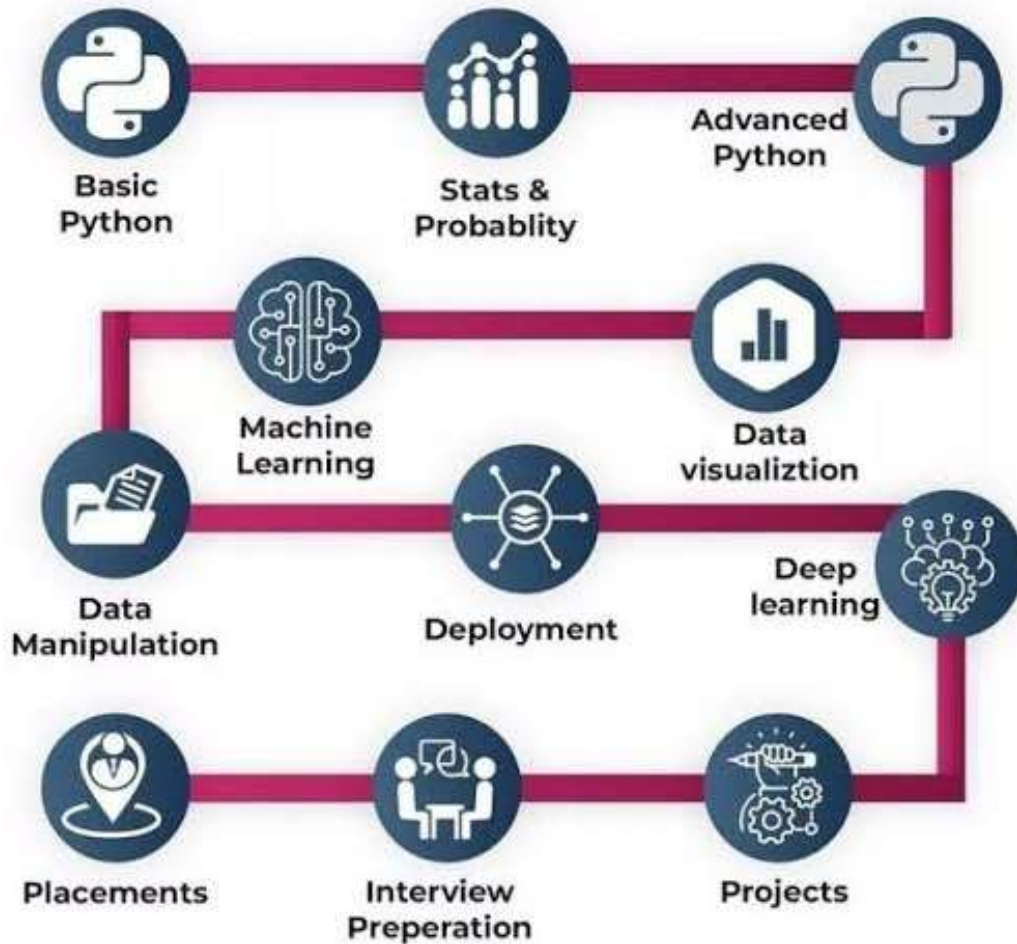
Health Care



Pelestarian Bahasa Sasak



DATA SCIENCE ROADMAP





- TERIMA KASIH -





SERTIFIKAT



Diberikan Kepada:

HAIRANI, S.Kom., M.Eng

Sebagai

PEMATERI

Dalam acara One Day Informatics with PC Challenge dengan tema "**Develop Solutions For Local Community To Be Extraordinary Student**" oleh Google Developer Student Club dan Programming Community Universitas Bumigora pada hari Sabtu-Minggu, 24-25 Desember 2022

SAYYIDINA AHAMDAL Q

Ketua Umum

KATARINA, M.Kom

Pembina

ALDI PRA FEBRIAN

Ketua Panitia