



Módulo 3 – Análisis Exploratorio y Programación Estadística

# Actividad: Análisis Univariado Titanic

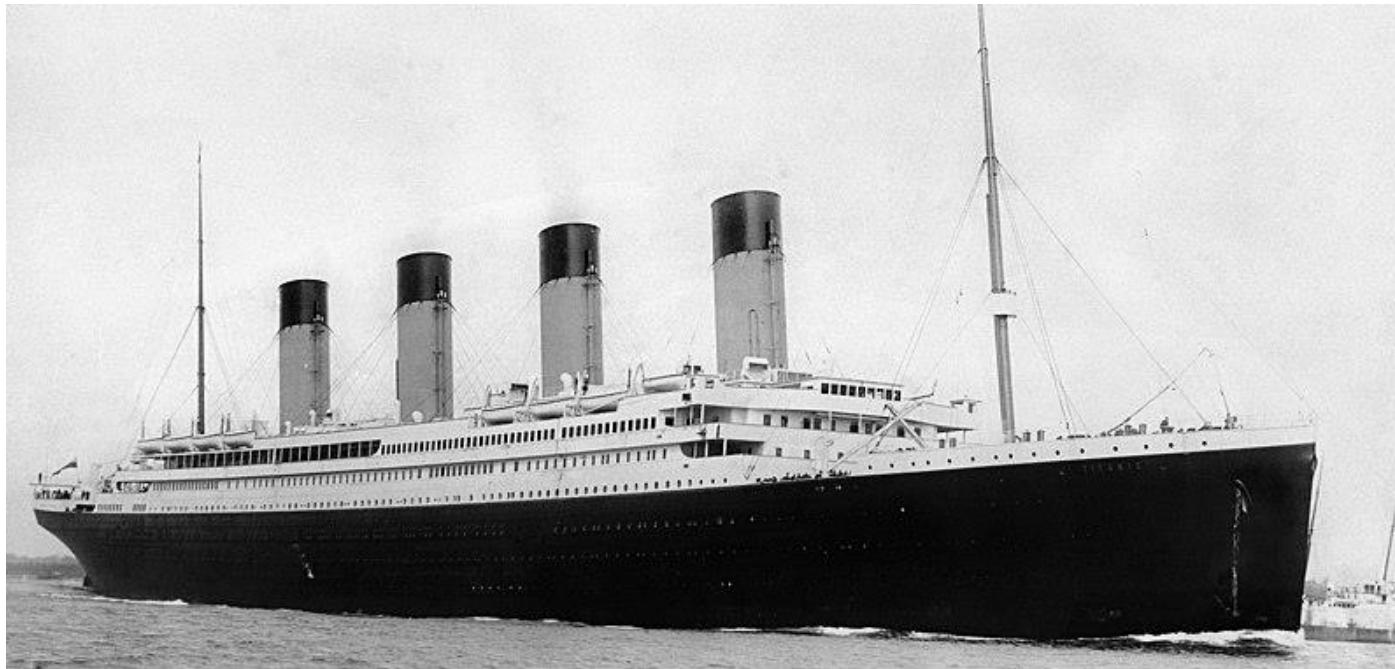
Ciencia de Datos

# Actividad: Análisis Univariado Titanic



# Caso Titanic

El 10 de Abril de 1912 partió desde el puerto de Southampton hacia New York el transatlántico Titanic, que sufrió un siniestro la noche del 14 de abril, en donde murieron 1.492 personas de un total de 2.208 convirtiendo esta tragedia en uno de los mayores naufragios de la historia.



# Caso Titanic



**MERCHANT SHIPPING ACT. 1906.** and **ALIENS ACT. 1905.**

## **GOING PASSENGERS.**

22

Returns of Passengers leaving the United Kingdom in ships bound for places out of Europe, and not within the Mediterranean Sea.

—All Passengers carried by such ships are to be included, whether proceeding to European or non-European Ports. In Class; 2nd Class; and 3rd Class Passengers are to be counted as separate groups. Children born of alien parents in the United Kingdom should be reckoned as the alien portion of the Return, and the fact that they were so born should be stated in the commodity column.

Ship Name	Official Number	Brimley Line	Master's Name	Registered Tonnage	Registration Number of the vessel if registered in another port or not a ship of the United States, China or Japan. Otherwise give name and port of registry.	Port Number of the port of Manufacture of Warships, China and Japan. Otherwise give name and port of registry.	Where Bound
TITANIC	134528	WHITE STAR LINE	L. J. Smith	46328 2401	26992	735	NEW YORK

<sup>2</sup> I hereby certify that the Provisions named below are Board Ship sufficient according to the requirements of the Merchant Shipping Act.

for 1150 State Adm. for a voyage of 74 days  
Date 10th April 1912 (Signature) *Albert Knott* Note

AMES AND DESCRIPTIONS OF BRITISH PASSENGERS EMBARKED AT THE PORT OF *Southampton*.

NAME OF PASSENGER	CLASS (Passenger Ticket No.)	Port at which Passenger has embarked in Land.	Profession, Occupation, or Calling of Passenger. <small>In the case of First Class Passenger, give additional information as to age.</small>	AGE OF PASSENGER <small>For the purpose of calculating the fare, see Table of Fare Rates.</small>		Country of last Permanent Residence?
				Adults of 12 years and upwards	Children under 12 years	
Edward Willey			Lamplighter	11		
Philip Duncan			Caretaker	24		
Edward Leakey			Gardener	21		
Owen G. Ellman			Carpenter	11		
John Ford			Waiter	22		
Henry Sadowsky			Boatman	17		
Sedrick Goodwin			Boatman	43		
Augusta			Wife			
Lillian			Servant	16		
Charles			Servant	48		
William			Child		11 10	
Jillie					9 8	
Harold						
Diana						
William Edmund			Housekeeper	30		
Brent Gann			Servant	21		
Tom Stanley			Servant	25	20	
Edwin Bach			Wife	31		
Milly			Child		2	
Bertina			Servant			
Eva			Housekeeper			
John Sage			Child	40		
June			Servant			
Selma			Housekeeper			
George			Child	20		
Charles			Servant	9		
Edith			Child	18		
Dorothy			Cook	16		
William			Servant	13		
			Child	11		
Total	2061			332451	129	

# Nómina de pasajeros

RIPTIONS OF BRITISH PASSENGERS EMBARKED AT THE PO

# Set de datos

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th... Heikkinen, Miss. Laina	female	38.0	1	0	PC 17599 STON/O2. 3101282	71.2833 7.9250	C85 NaN	C S
2	3	1	3	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	26.0	0	0	113803	53.1000	C123	S
3	4	1	1	Allen, Mr. William Henry	male	35.0	1	0	373450	8.0500	NaN	S
4	5	0	3	Moran, Mr. James	male	NaN	0	0	330877	8.4583	NaN	Q
5	6	0	3	McCarthy, Mr. Timothy J	male	54.0	0	0	17463	51.8625	E46	S
6	7	0	1	Palsson, Master. Gosta Leonard	male	2.0	3	1	349909	21.0750	NaN	S
7	8	0	3	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)	female	27.0	0	2	347742	11.1333	NaN	S
8	9	1	3	Nasser, Mrs. Nicholas (Adele Achem)	female	14.0	1	0	237736	30.0708	NaN	C
9	10	1	2									

# Set de datos

A continuación, se describe cada columna:

- **Passenger Id:** Muestra el id del Pasajero (correlativo).
- **Survived:** Se encuentra en 2 valores 0 si murió en la tragedia y 1 si sobrevivió.
- **Pclass:** Determina la clase del pasajero, 1ra, 2da o 3era clase.
- **Name:** Nombre de los Pasajeros.
- **Sex:** Sexo de los Pasajeros.
- **Age:** Edad de los Pasajeros.
- **SibSp:** Número de parientes como Hermano, Hermana, Hermanastra, Hermanastro, Esposo o Esposa.
- **Parch:** Número de parientes como Madre, Padre, Hijo, Hija, Hijastro, Hijastra.
- **Ticket:** Número del ticket o boleto.
- **Fare:** Tarifa del pasaje.
- **Cabin:** Número de cabina del pasajero.
- **Embarked:** Muestra los datos del puerto de embarcadero. (C = Cherbourg, Q = Queenston, S = Southapmpton).

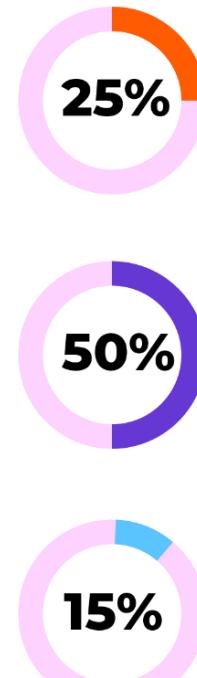
# Instrucciones

Construya un notebook jupyter, **ordenado, bien documentado y reproducible**, que permita responder lo siguiente:

- Análisis univariado de la edad de los pasajeros.
- Análisis univariado del valor del pasaje.
- Del análisis anterior, ¿Qué insights puede levantar?.



Recuerde aplicar los conceptos, técnicas y herramientas aprendidos durante la sesión.



¡Éxito!