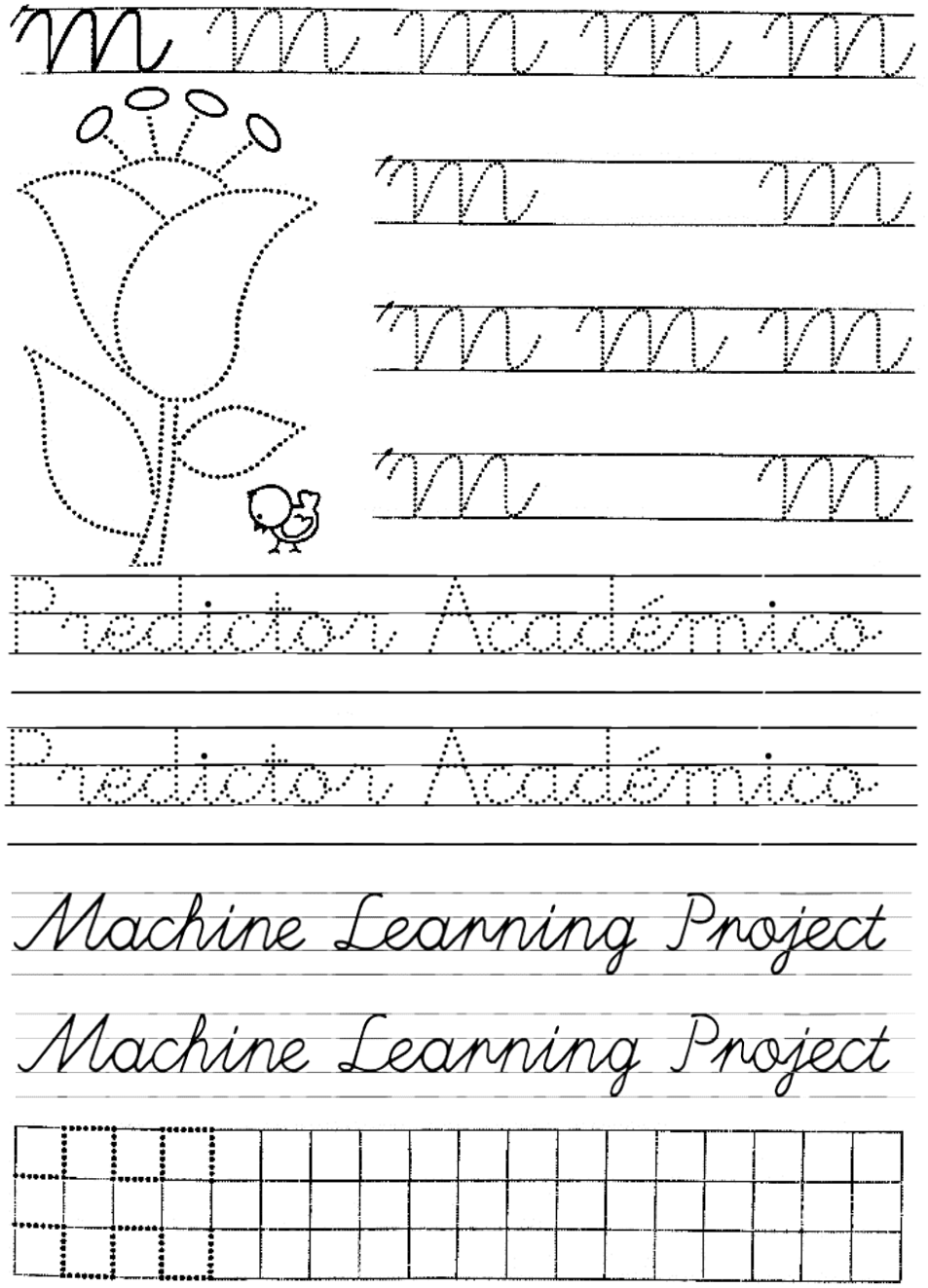
PREDICTOR

Académico

Machine Learning Project

Paula García Fernández

Noviembre 2024



DATOS DE EUROSTAT

España es líder europeo en fracaso escolar y en brecha educativa entre hombres y mujeres

Todavía un 14% de los jóvenes abandona sus estudios sin completarlos, pero en el caso de los hombres, escala al 16%. La UE ha fijado un objetivo del 9% en el año 2023

Manifestación por la educación pública en Madrid. (Europa Press/Fernando Sánchez)

PANORAMA DE LA EDUCACIÓN OCDE 2023

España lidera la UE en abandono escolar pese a ser el país con más horas lectivas

• Los alumnos de secundaria reciben 181 horas anuales más que la media europea y lo hacen en jornada concentrada

La OCDE destaca la desviación de las horas lectivas de las escuelas españolas respecto a los países europeos y de la OCDE (Ana Jiménez / Propias)

Vinculan el abandono escolar en España con el Fútbol y lo elevan al 31%, pero es falso

Andreas Gursky*, Paris Montparnasse*, 1993.

FEATURE ENGINEERING

ESCALADO NOTA

- 0
- 10

EDUCACIÓN PARENTAL

- NINGUNA
- PRIMARIA
- SECUNDARIA
- UNIVERSIDAD
- POSGRADO - PHD

CALIDAD EDUCATIVA

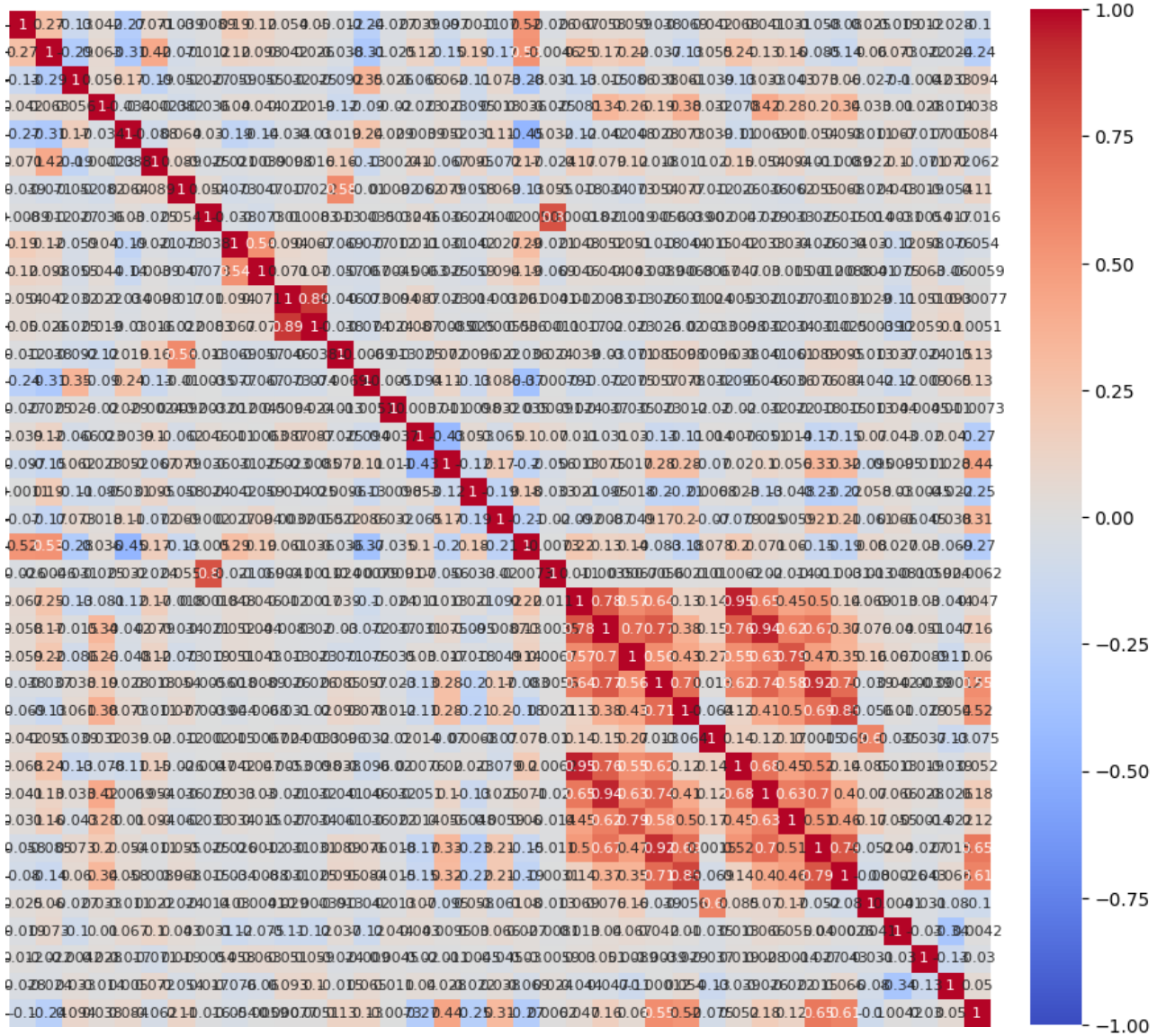
- PÚBLICA
- PRIVADA

INFLUENCIA AMISTADES

- BUENA
- MEDIA
- MALA

MOTIVACIÓN

- ALTA
- MEDIA
- BAJA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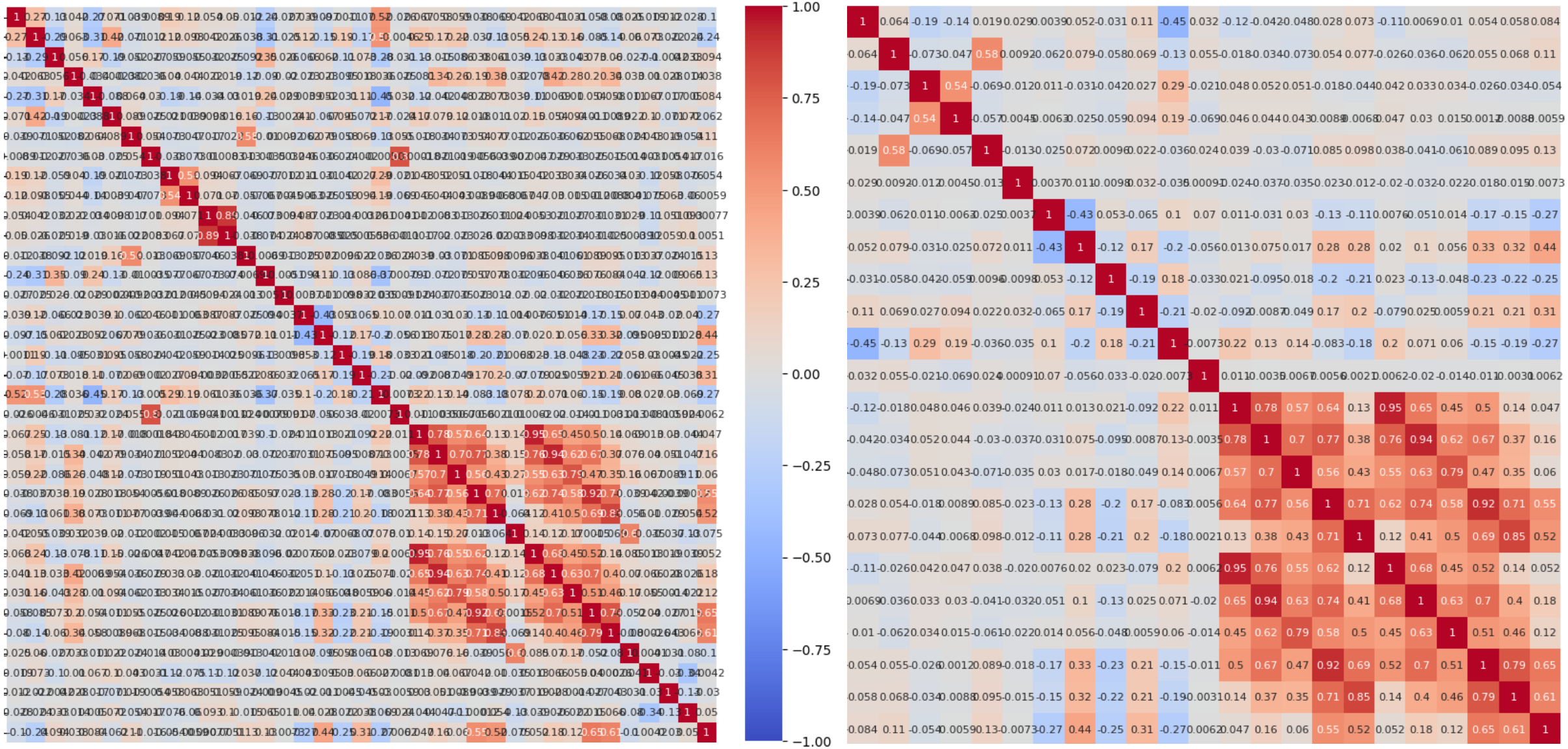
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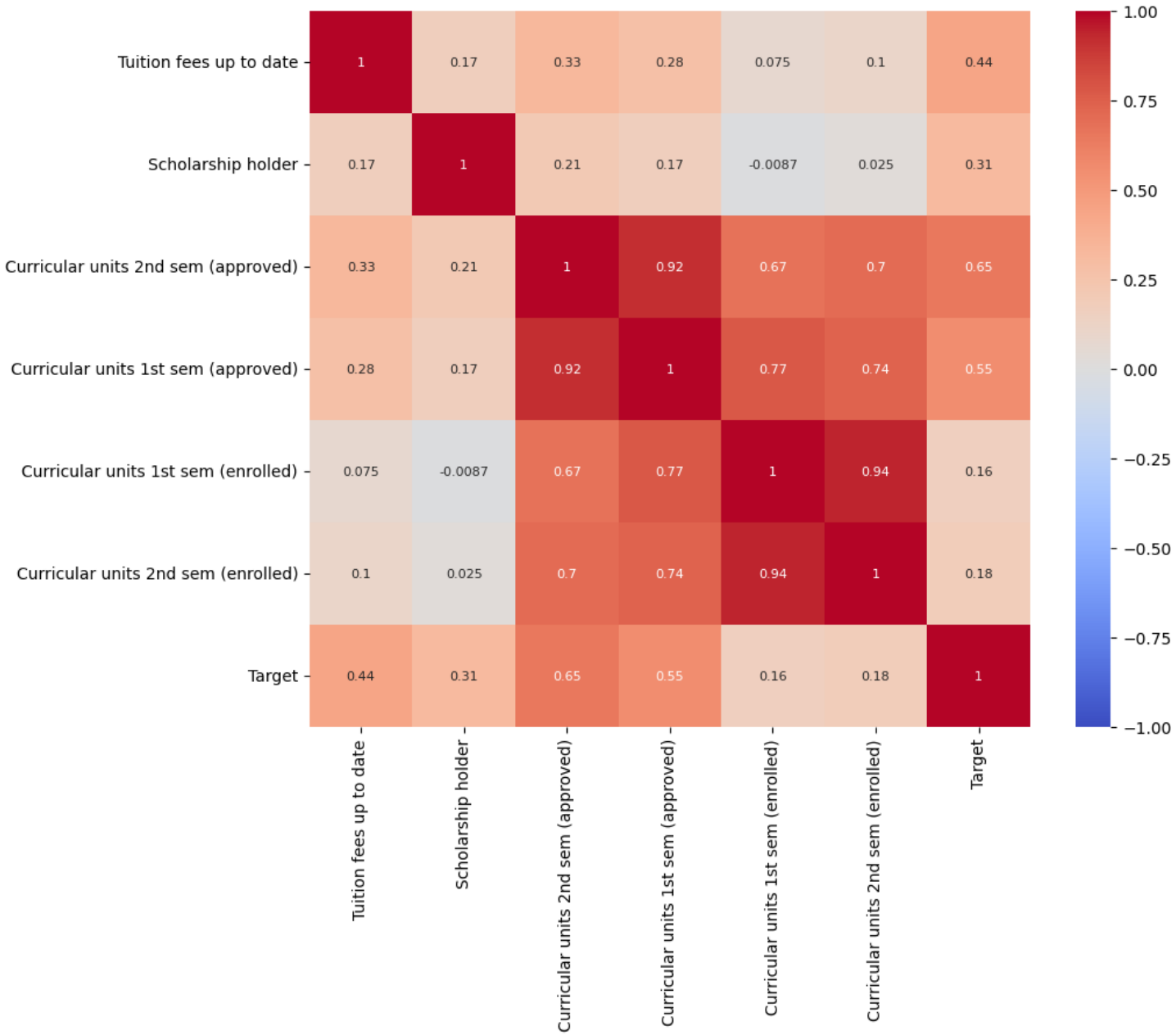
Tuition fees up to date
Scholarship holder
Curricular units 2nd sem (approved)
Curricular units 1st sem (approved)
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Target
1 0.17 0.33 0.28 0.075 0.1 0.44
0.17 1 0.21 0.17 -0.0087 0.025 0.31
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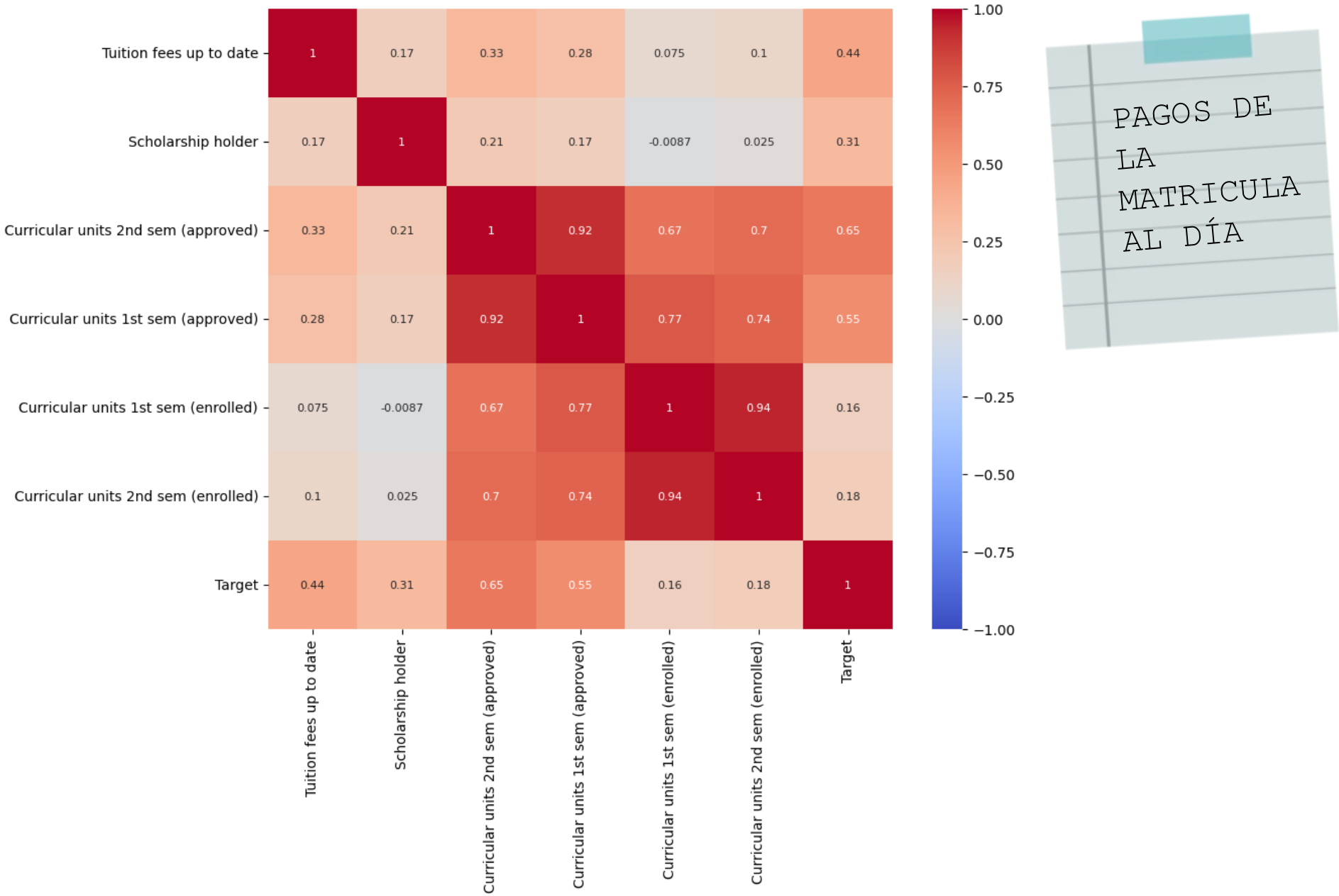
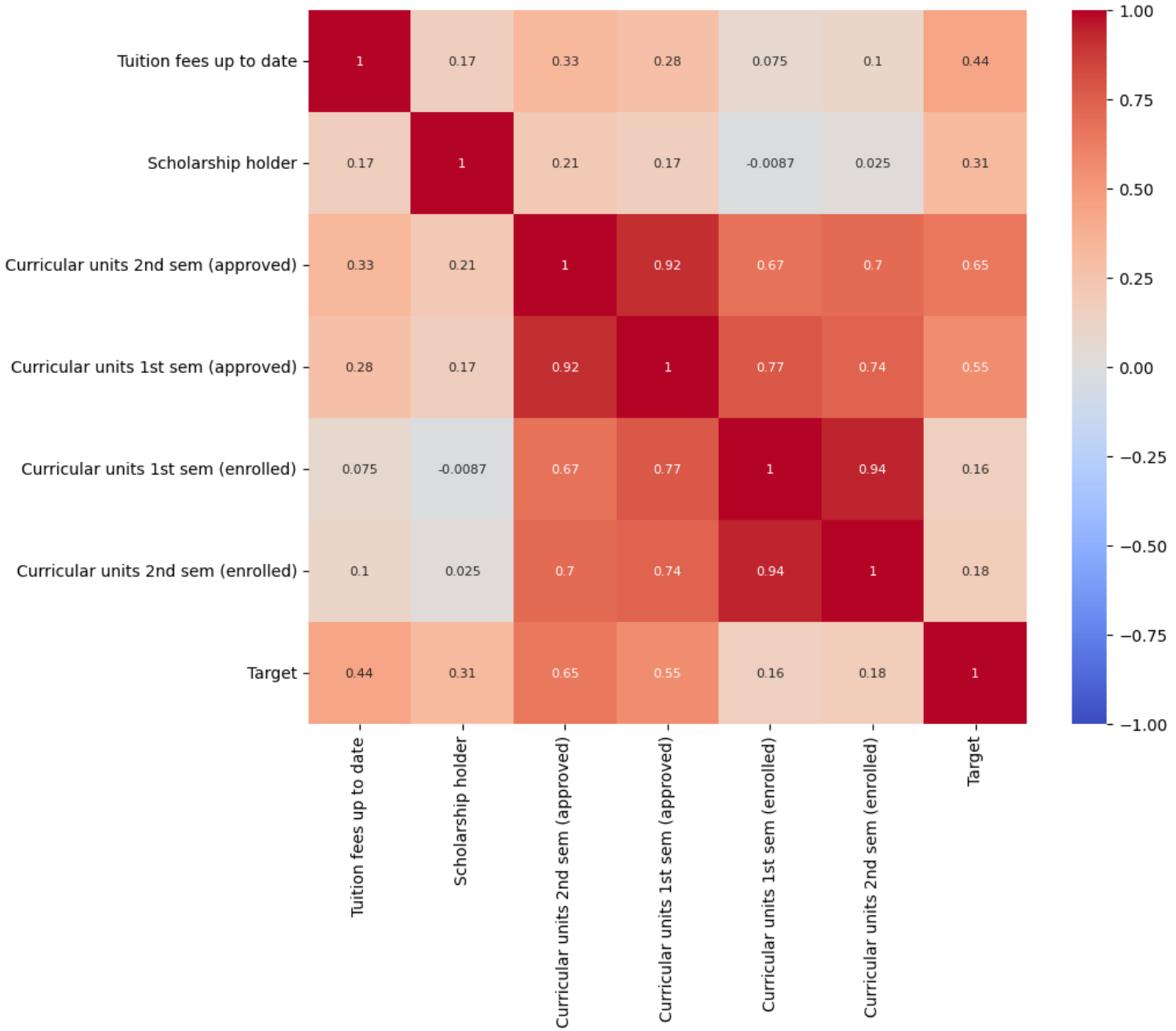


PAGOS DE LA MATRICULA AL DÍA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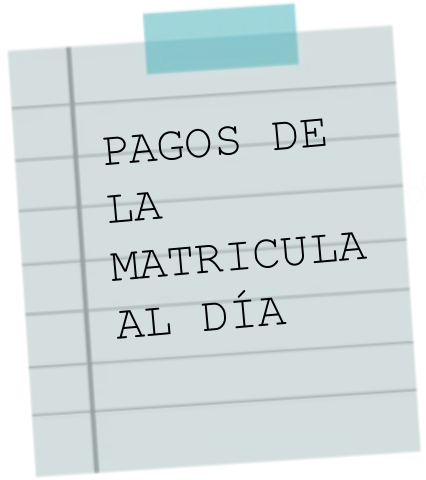
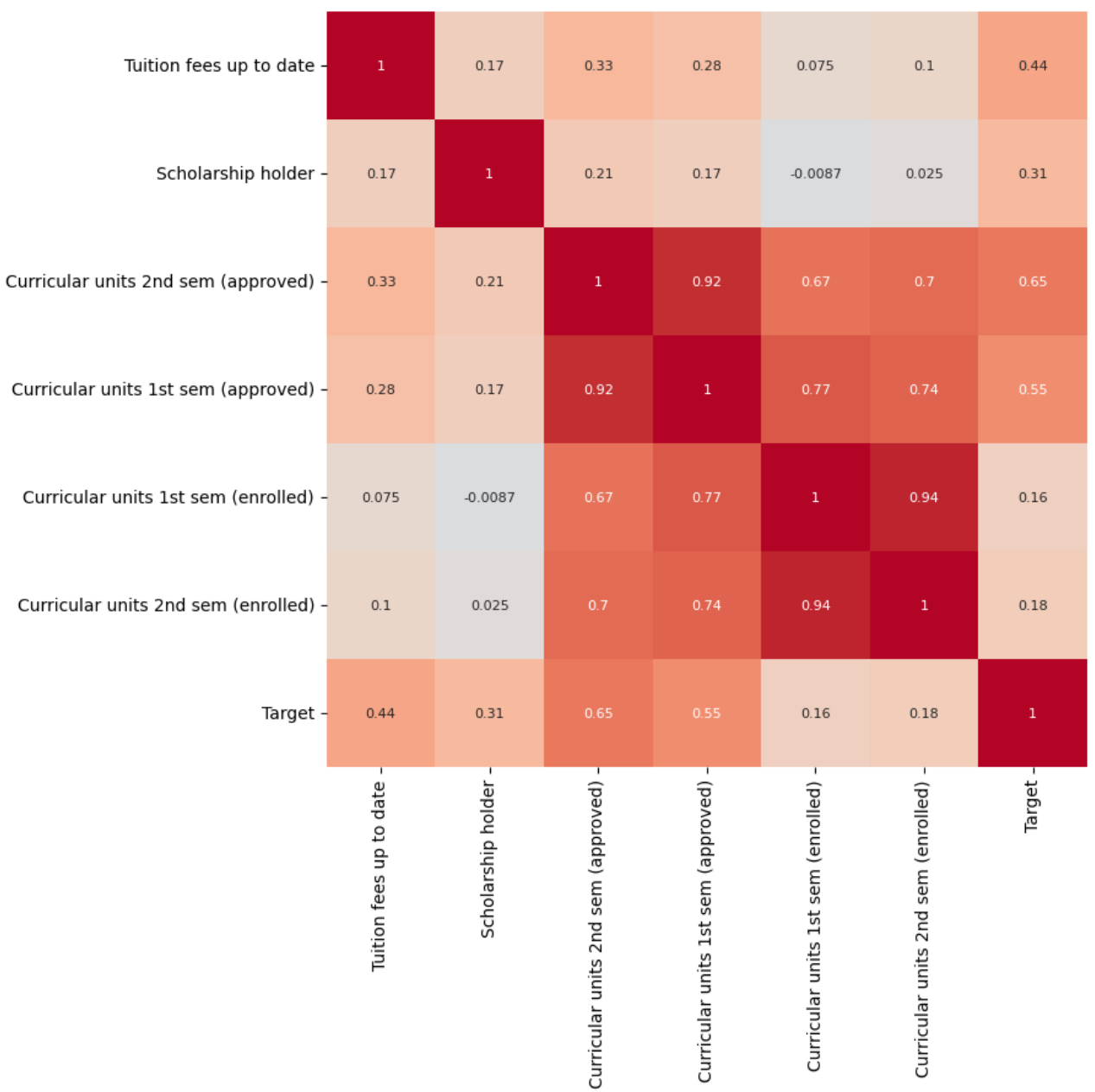

PAGOS DE
LA
MATRICULA
AL DÍA

BECADOS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PAGOS DE LA MATRICULA AL DÍA
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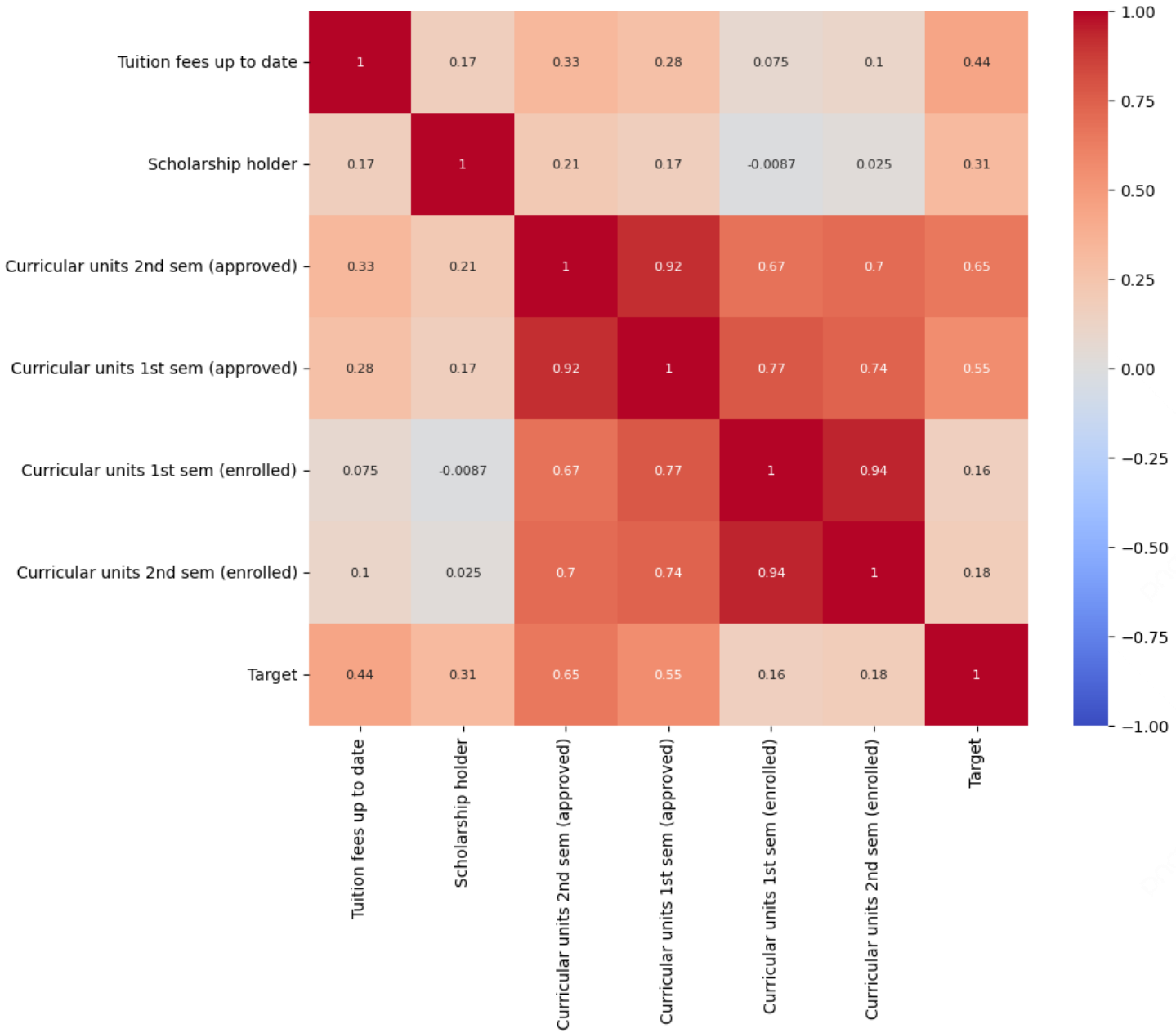
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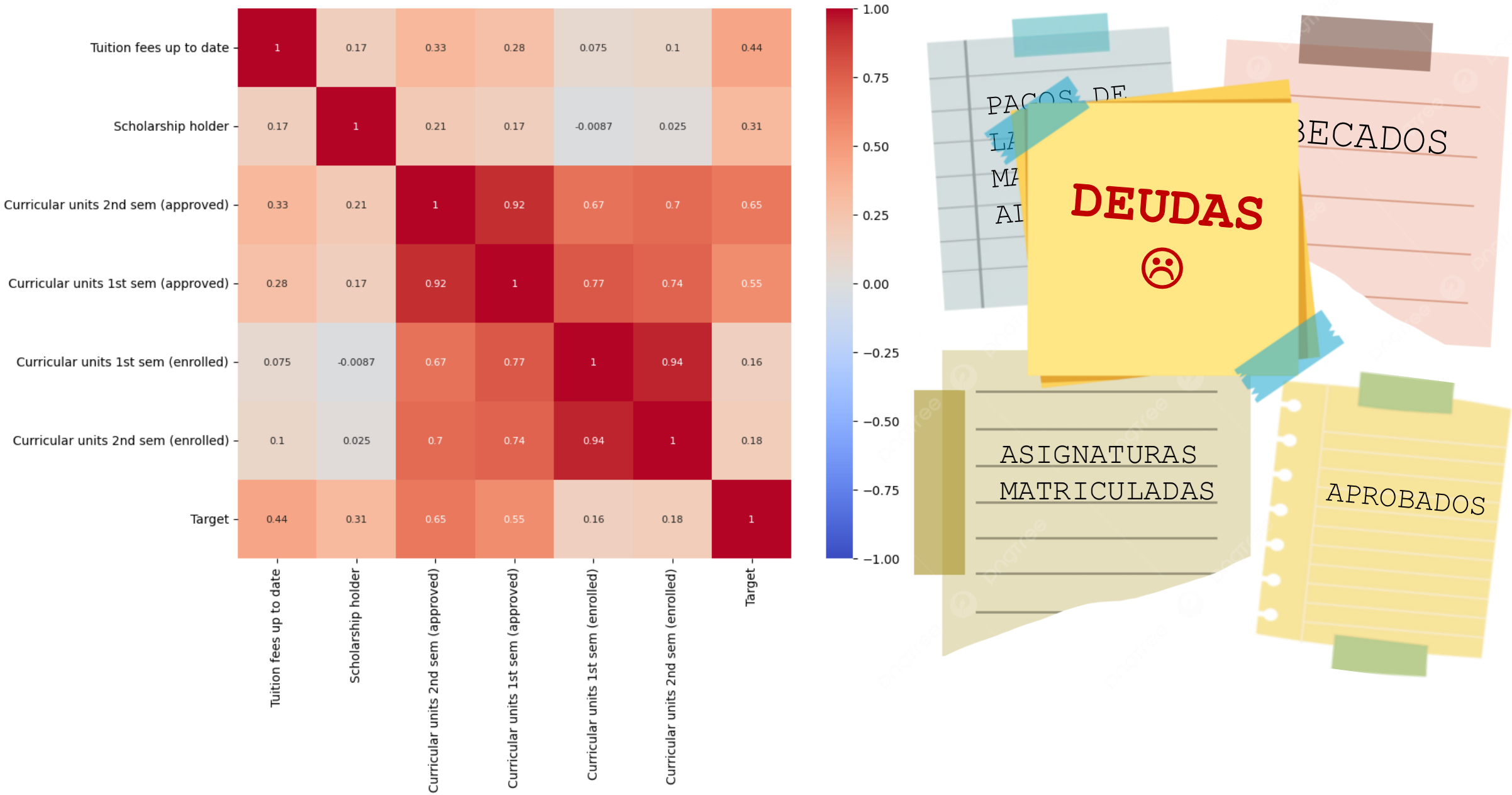
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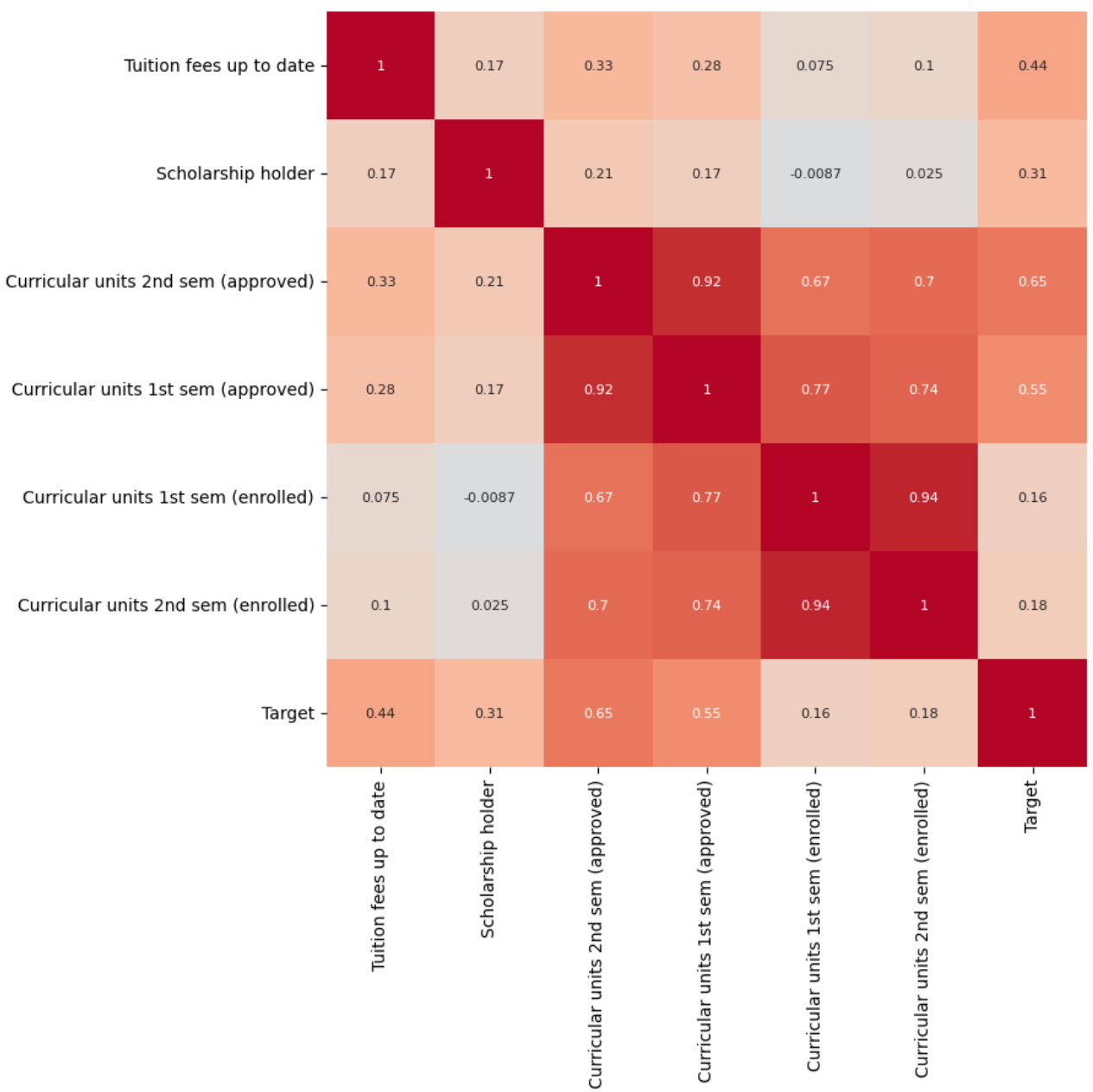
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DEUDAS
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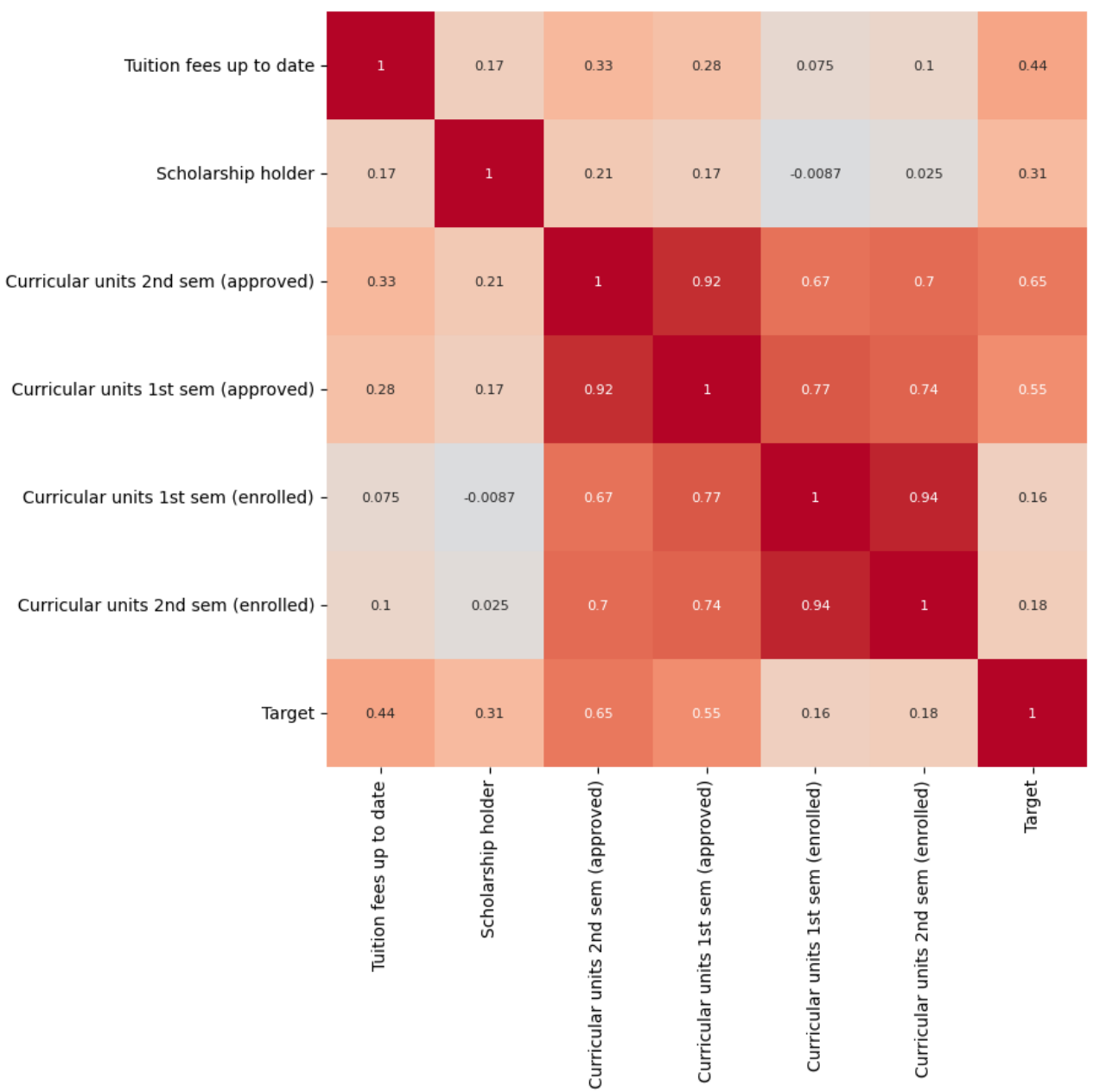
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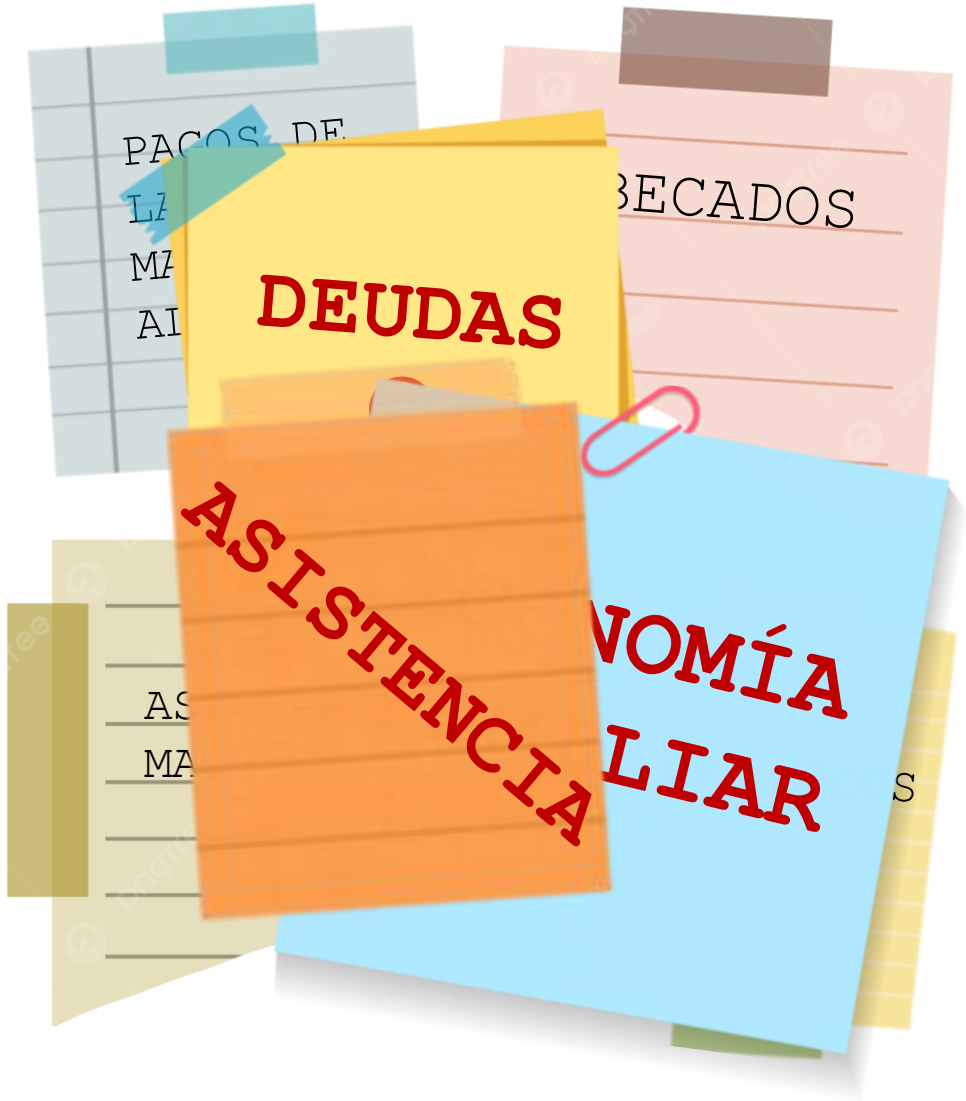
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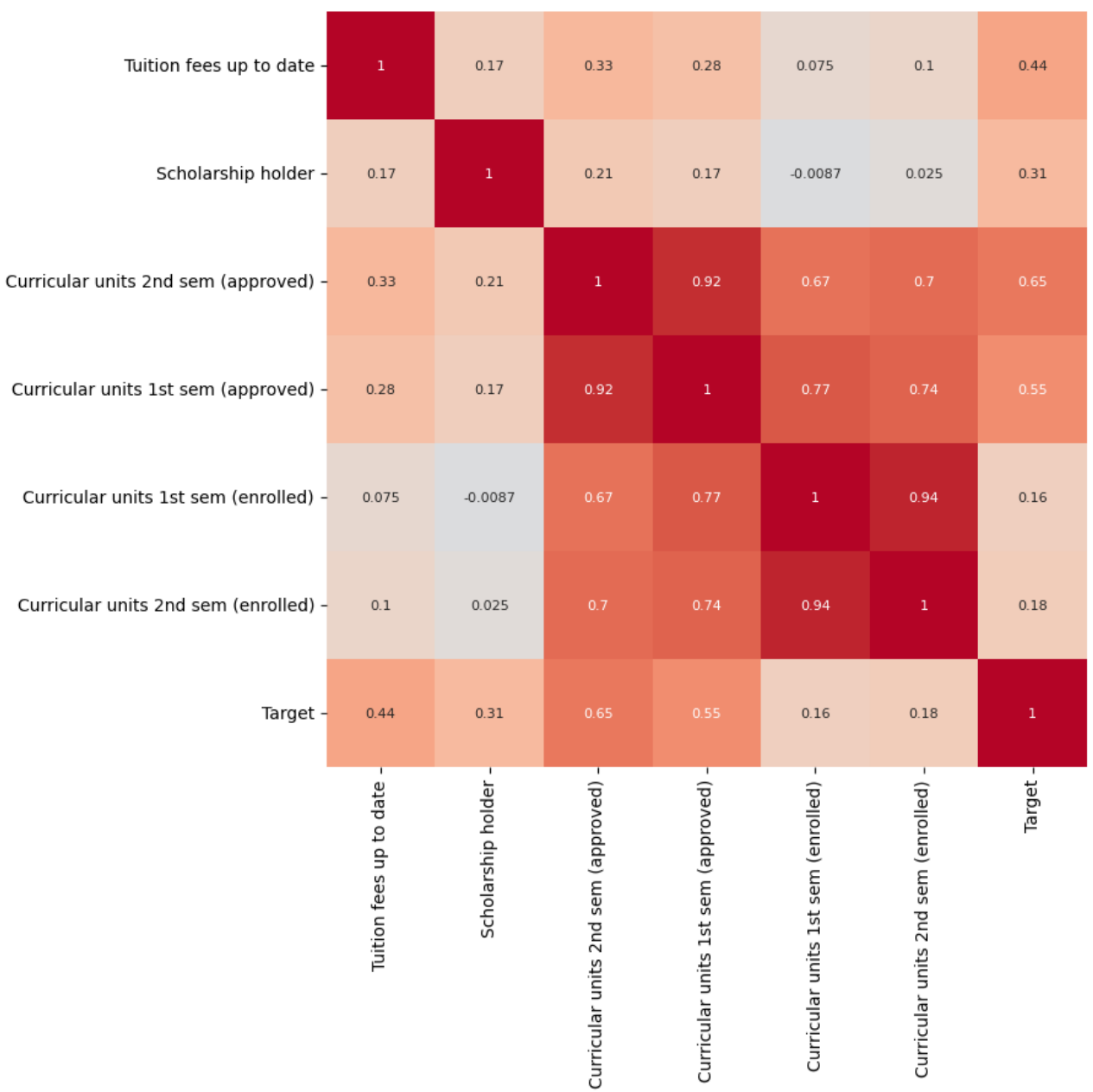
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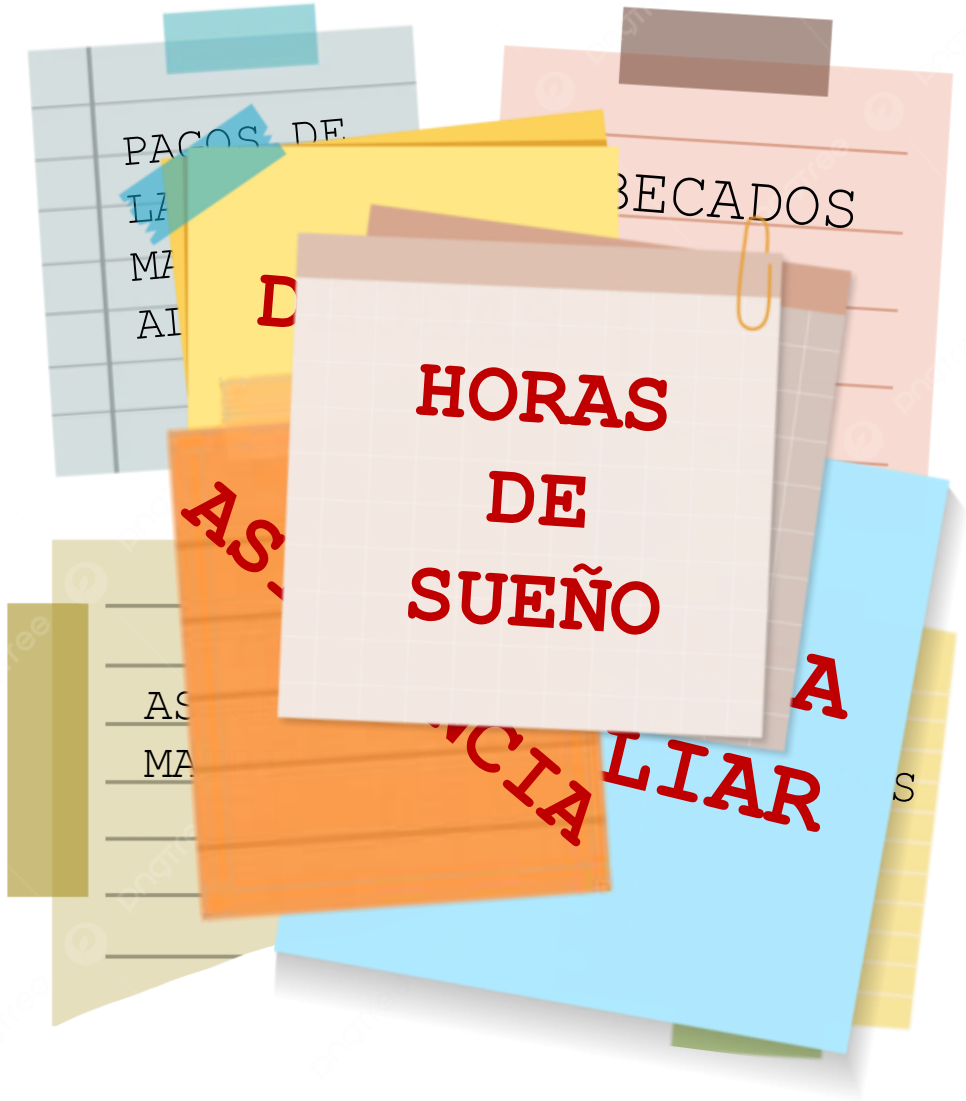
HORAS
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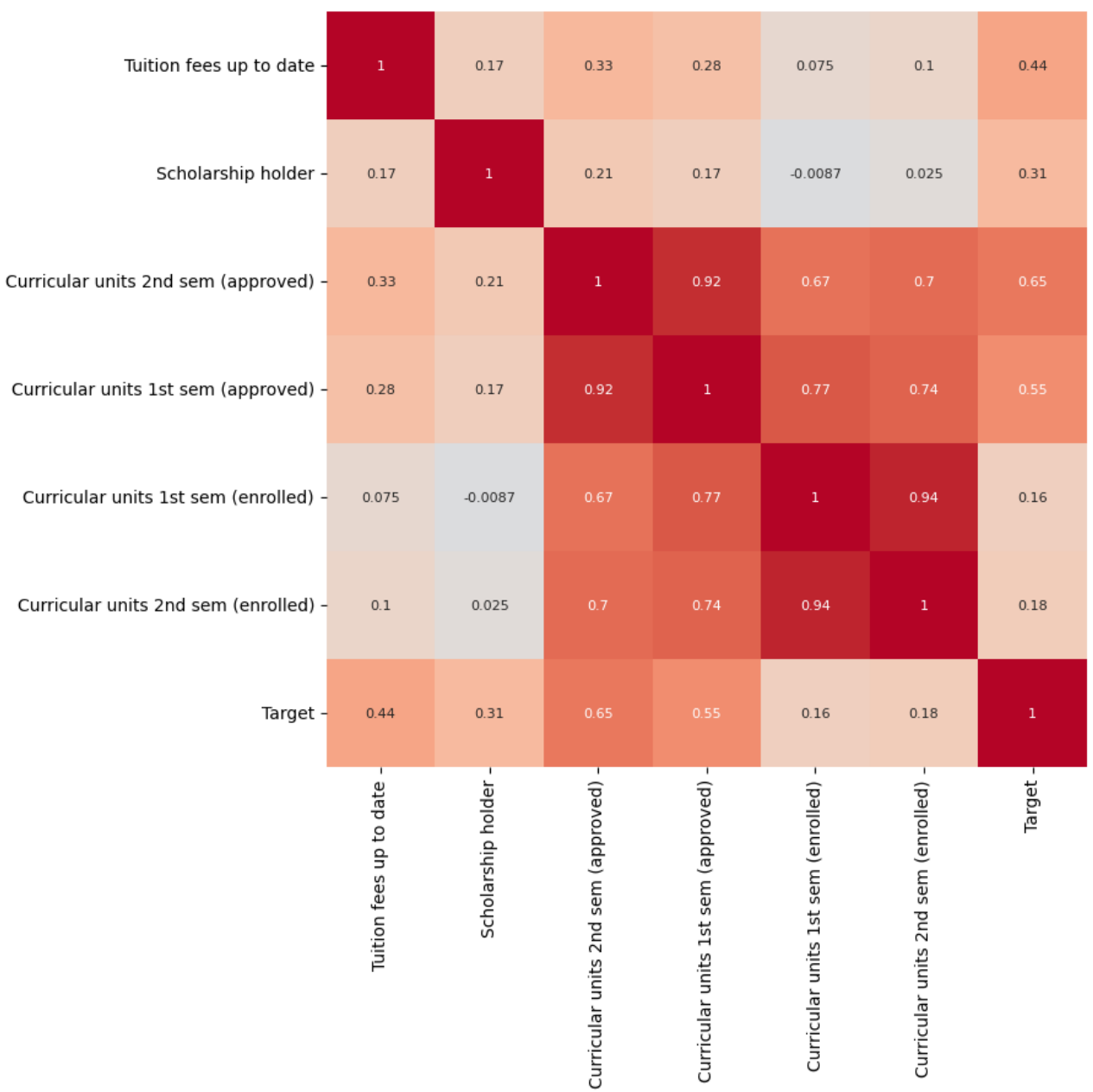
SUEÑO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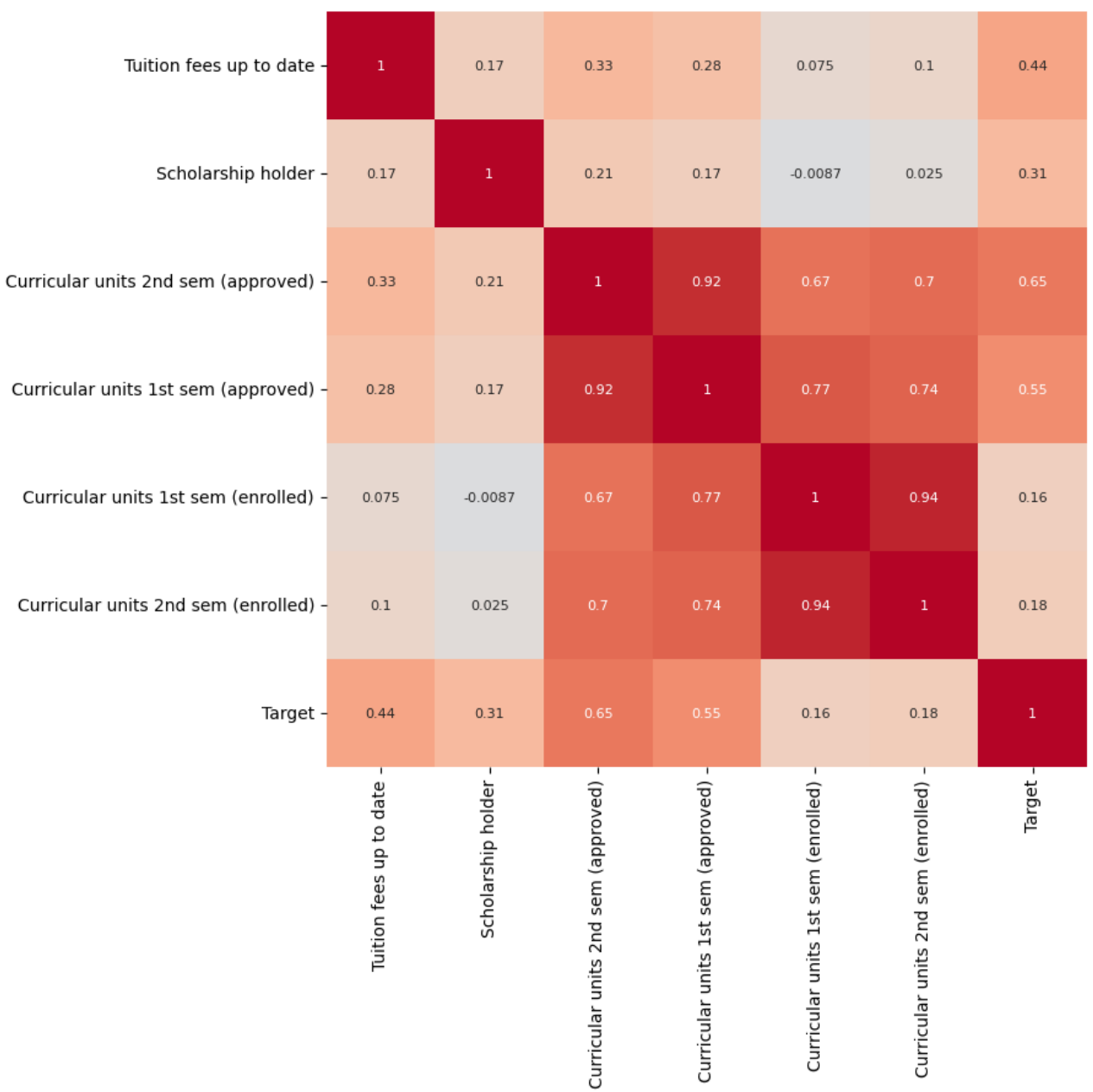
DEPORTE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INFLUENCIA
AMISTADES

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Curricular units 2nd sem (enrolled)
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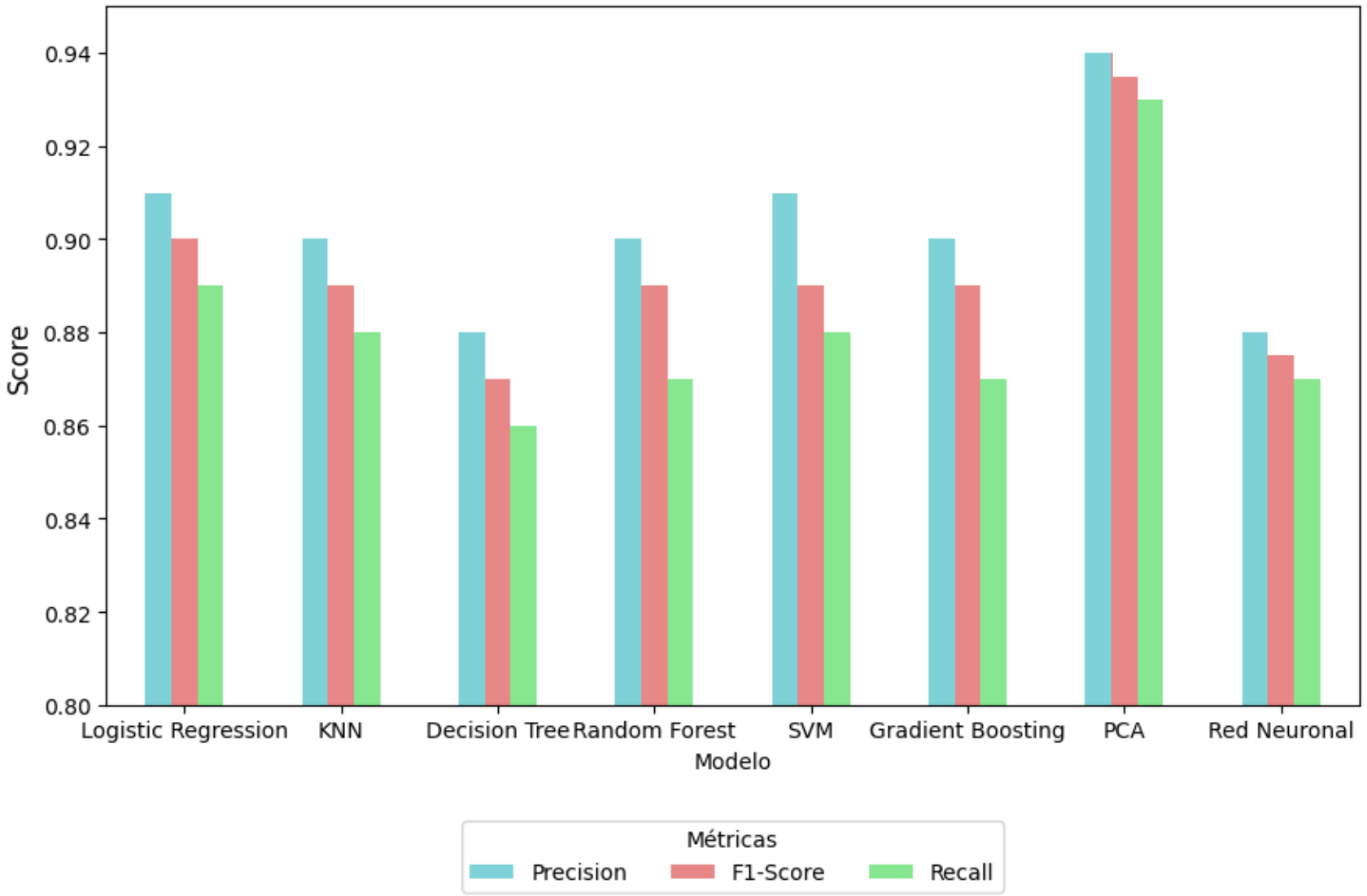
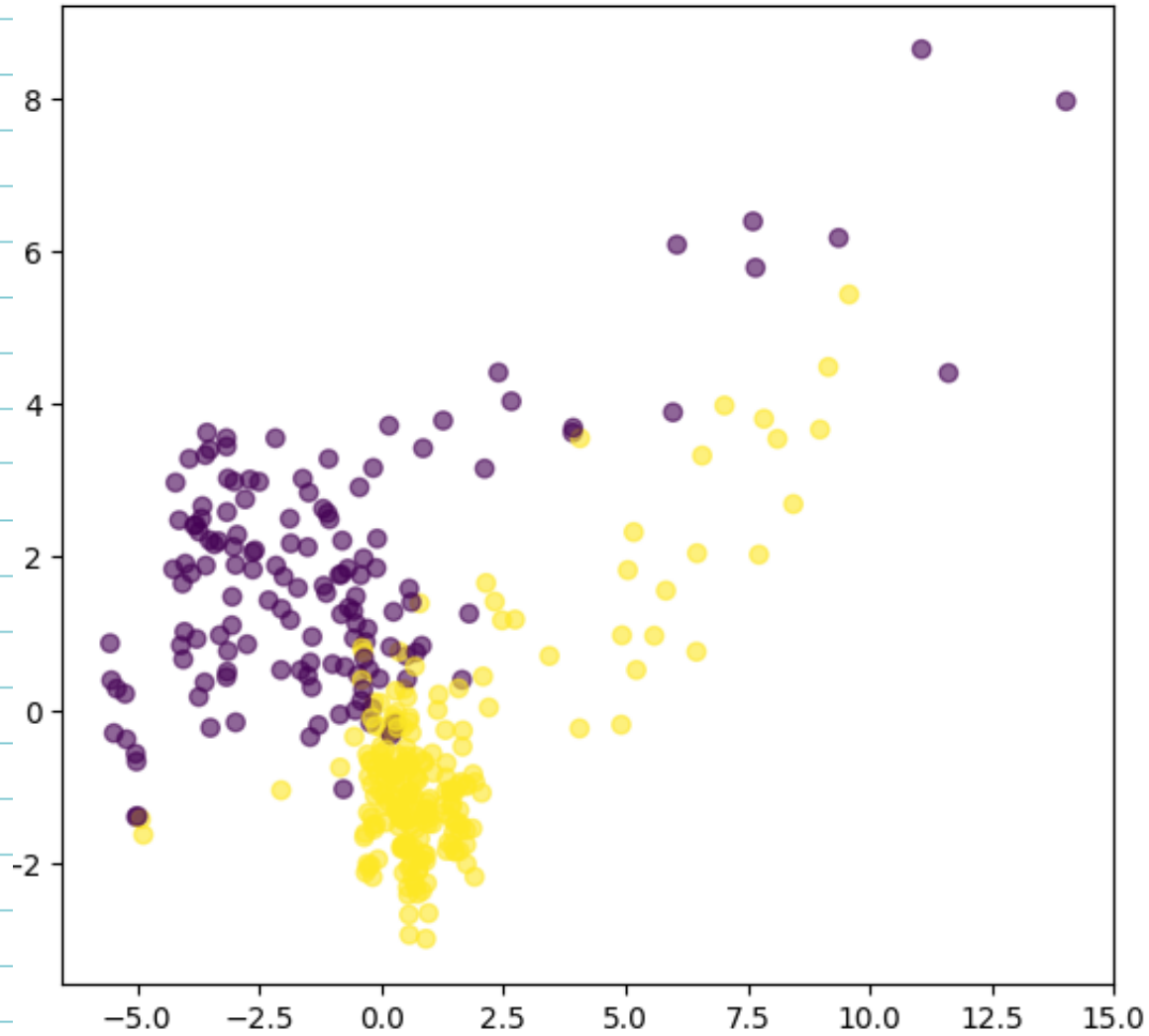
CALIDAD DEL PROFESOR
INFLUENCIA AMISTADES

Modelos


0.94
0.92
0.90
0.88
0.86
0.84
0.82
0.80
Score
Logistic Regression
KNN
Decision Tree
Random Forest
SVM
Gradient Boosting
PCA
Red Neuronal
Modelo
Métricas
Precision
F1-Score
Recall

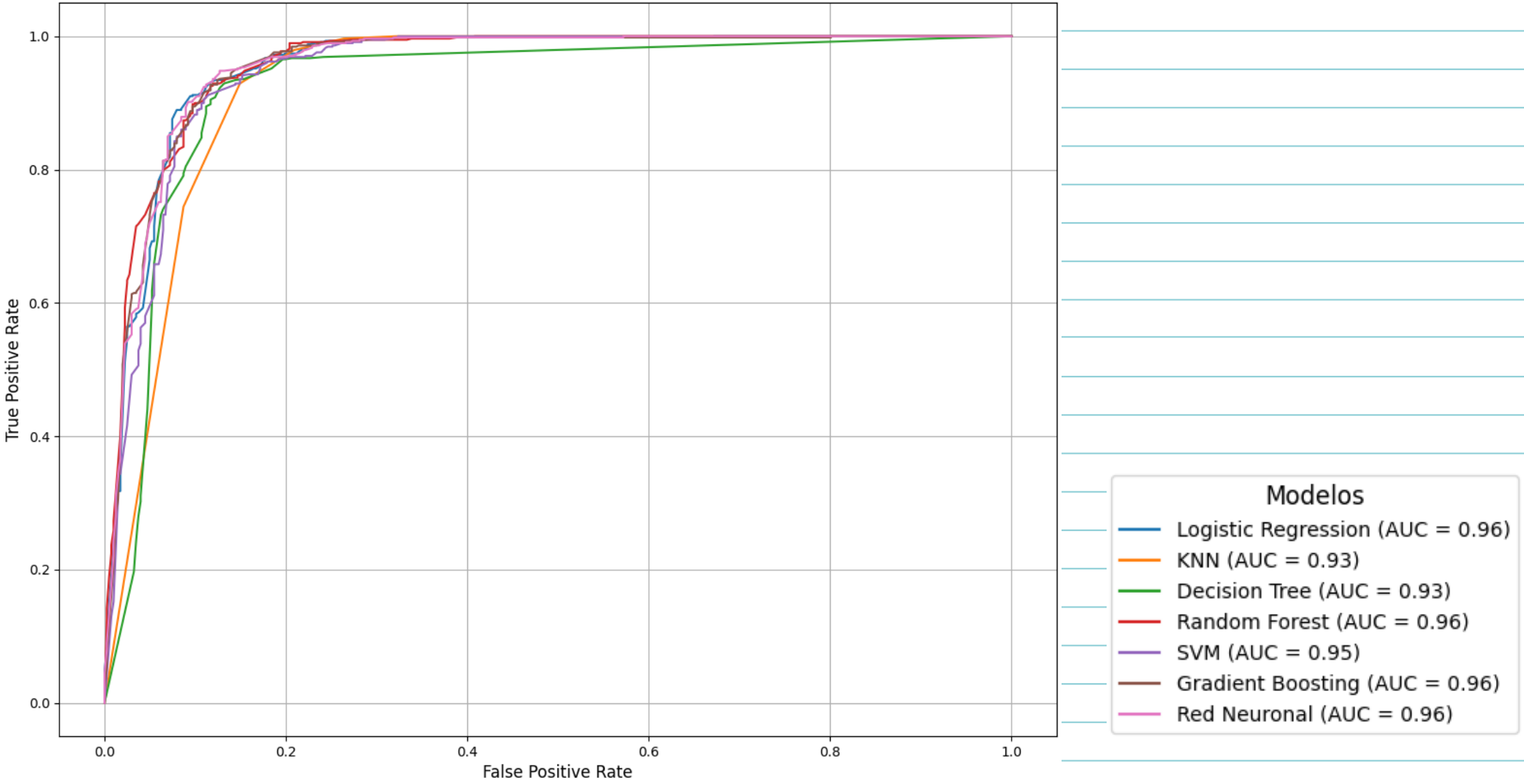
PCA - Logistic Regression



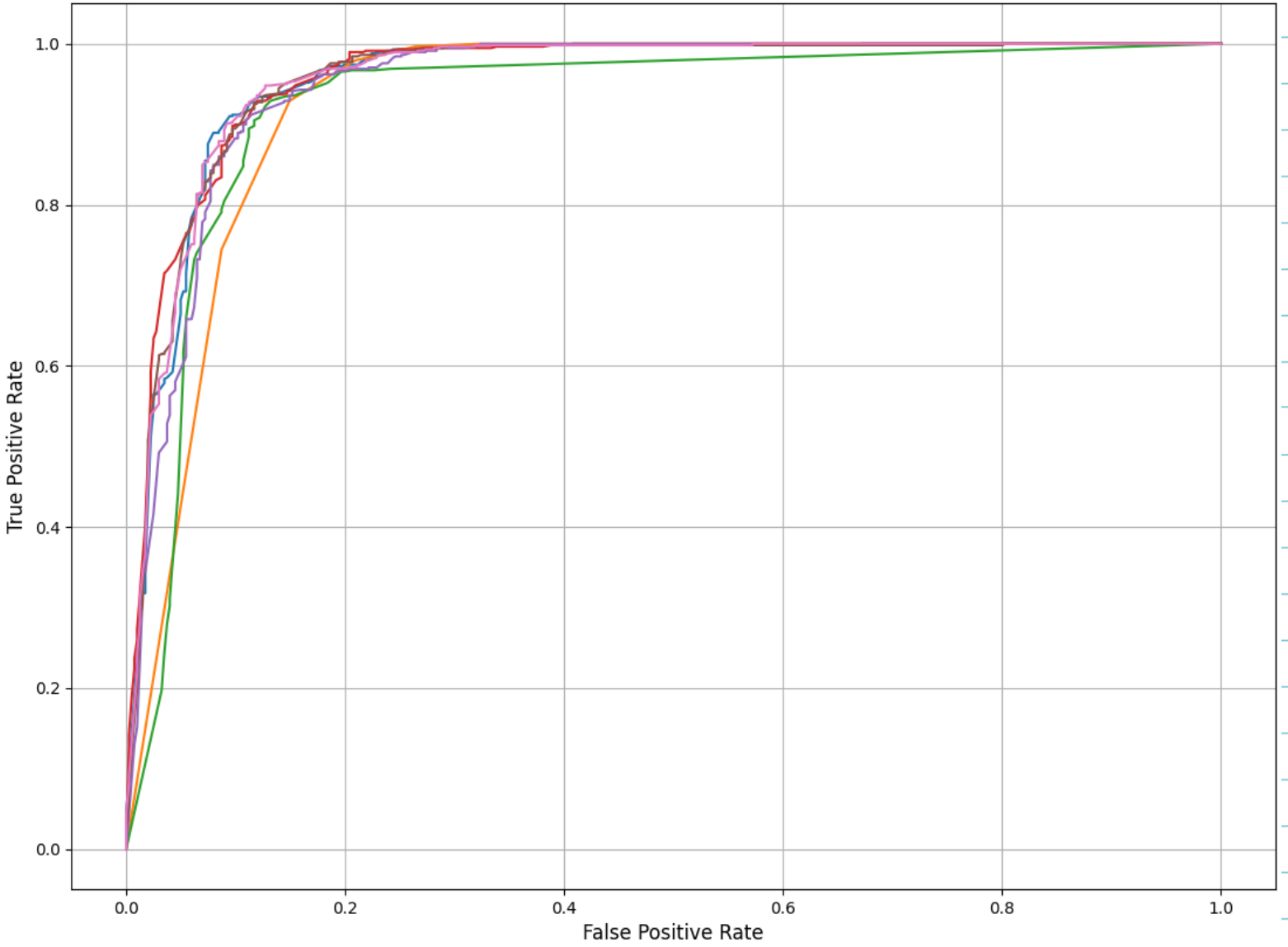
GRADUADOS

NO GRADUADOS

ROC curves


True Positive Rate
False Positive Rate
0.0
0.2
0.4
0.6
0.8
1.0
Modelos
Logistic Regression (AUC = 0.96)
KNN (AUC = 0.93)
Decision Tree (AUC = 0.93)
Random Forest (AUC = 0.96)
SVM (AUC = 0.95)
Gradient Boosting (AUC = 0.96)
Red Neuronal (AUC = 0.96)

ROC curves

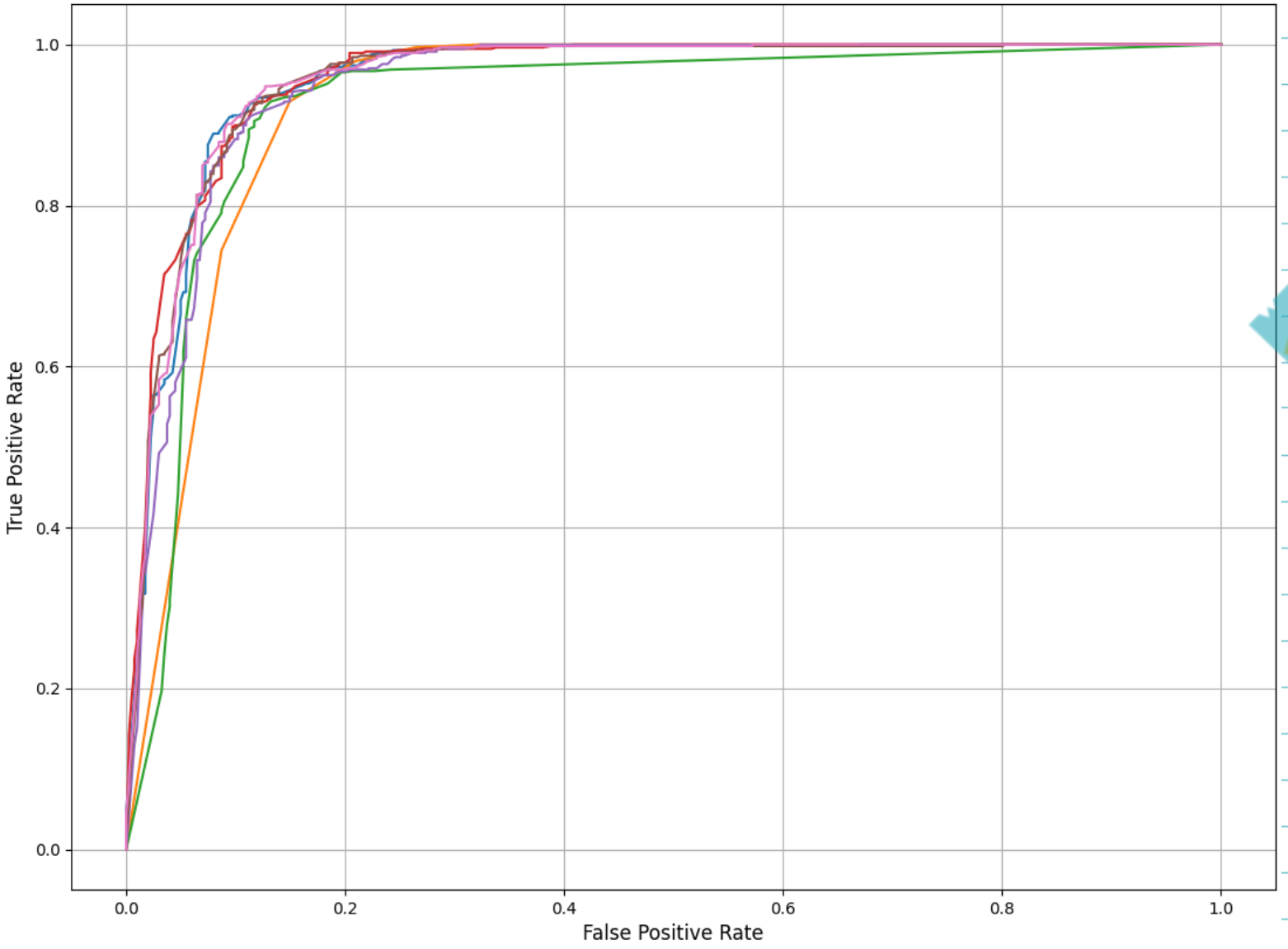


SVM

Standard Scaler

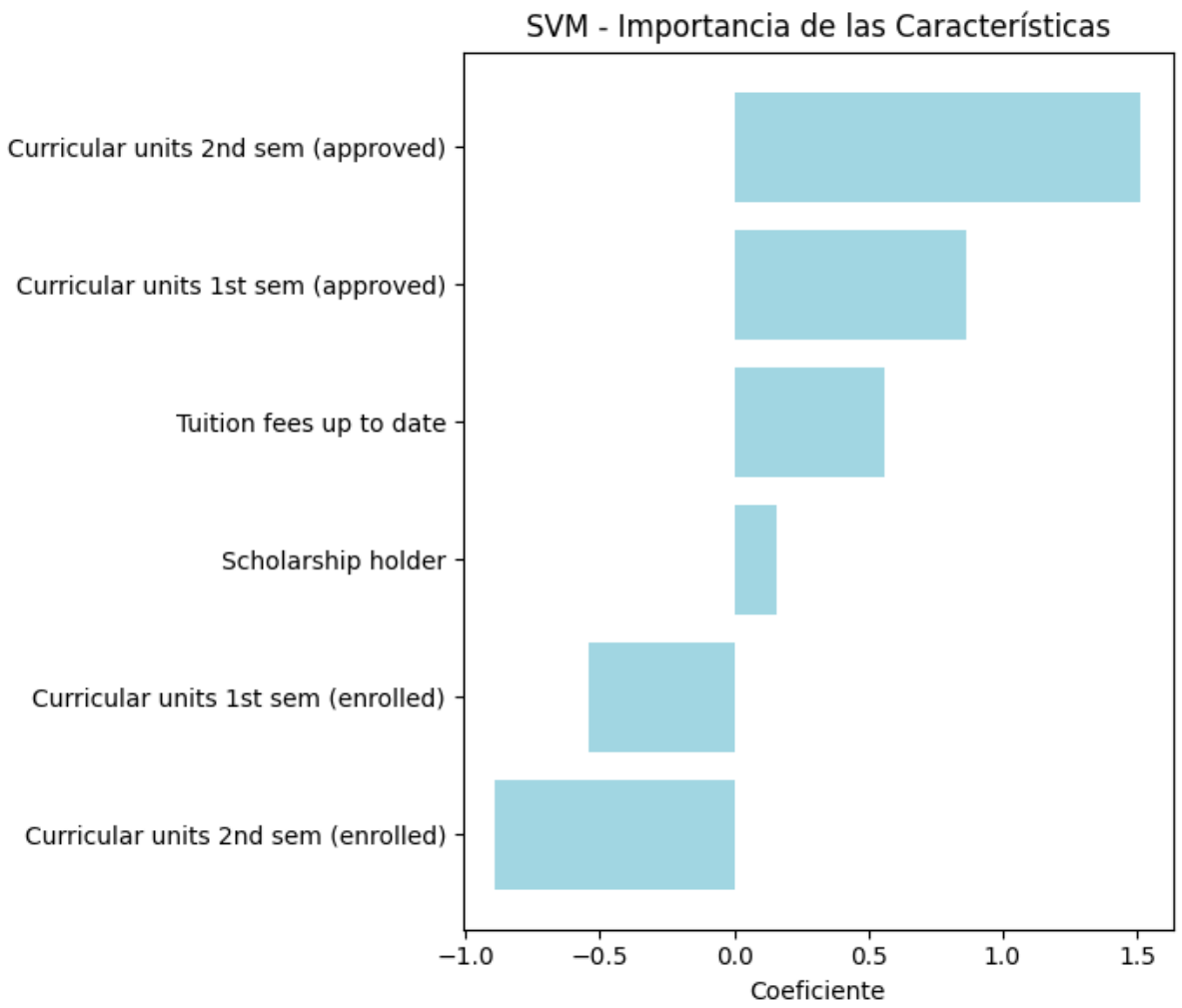
- C = 0.1
- kernel:"linear"
- gamma = "scale"

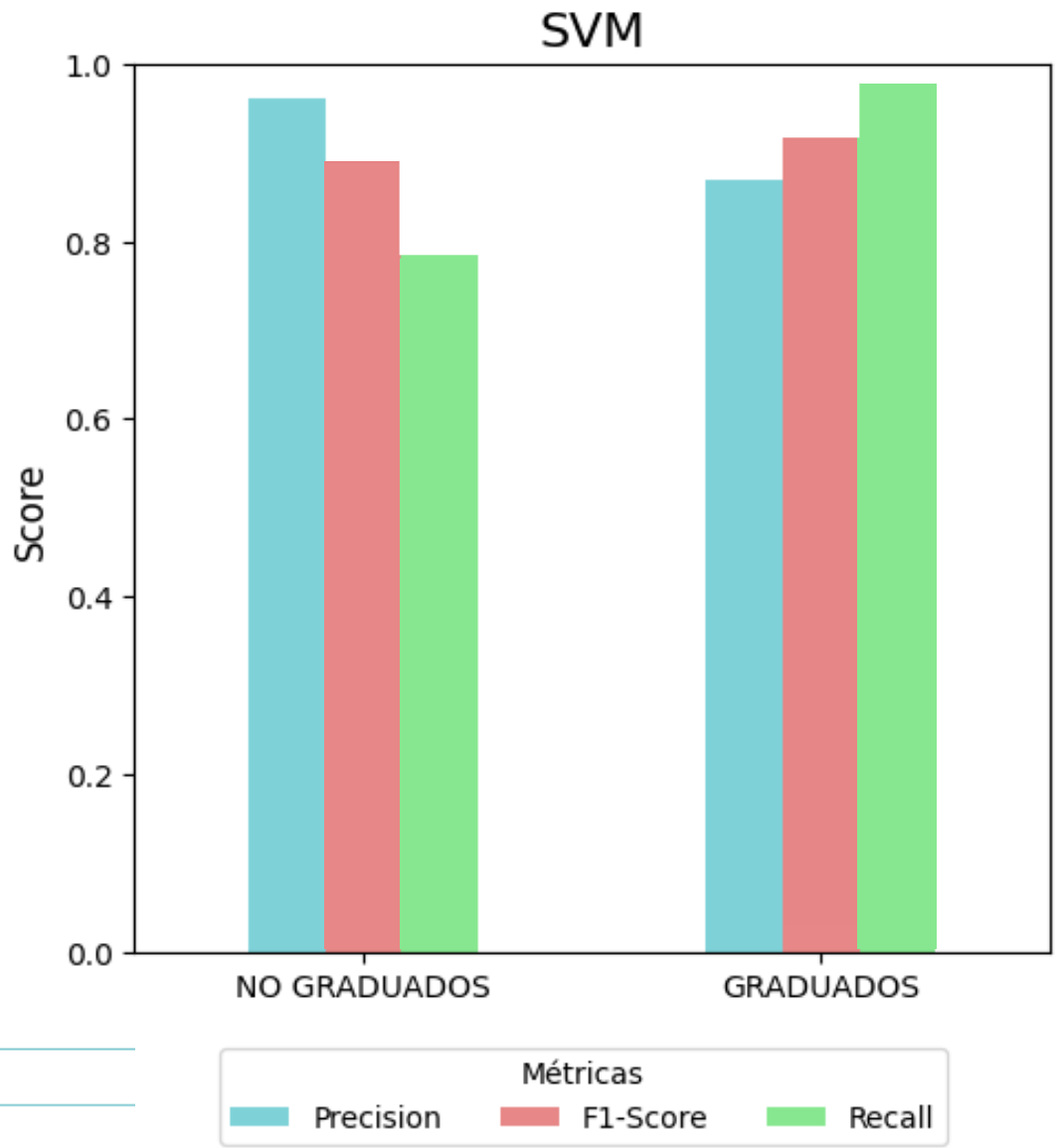
ROC curves



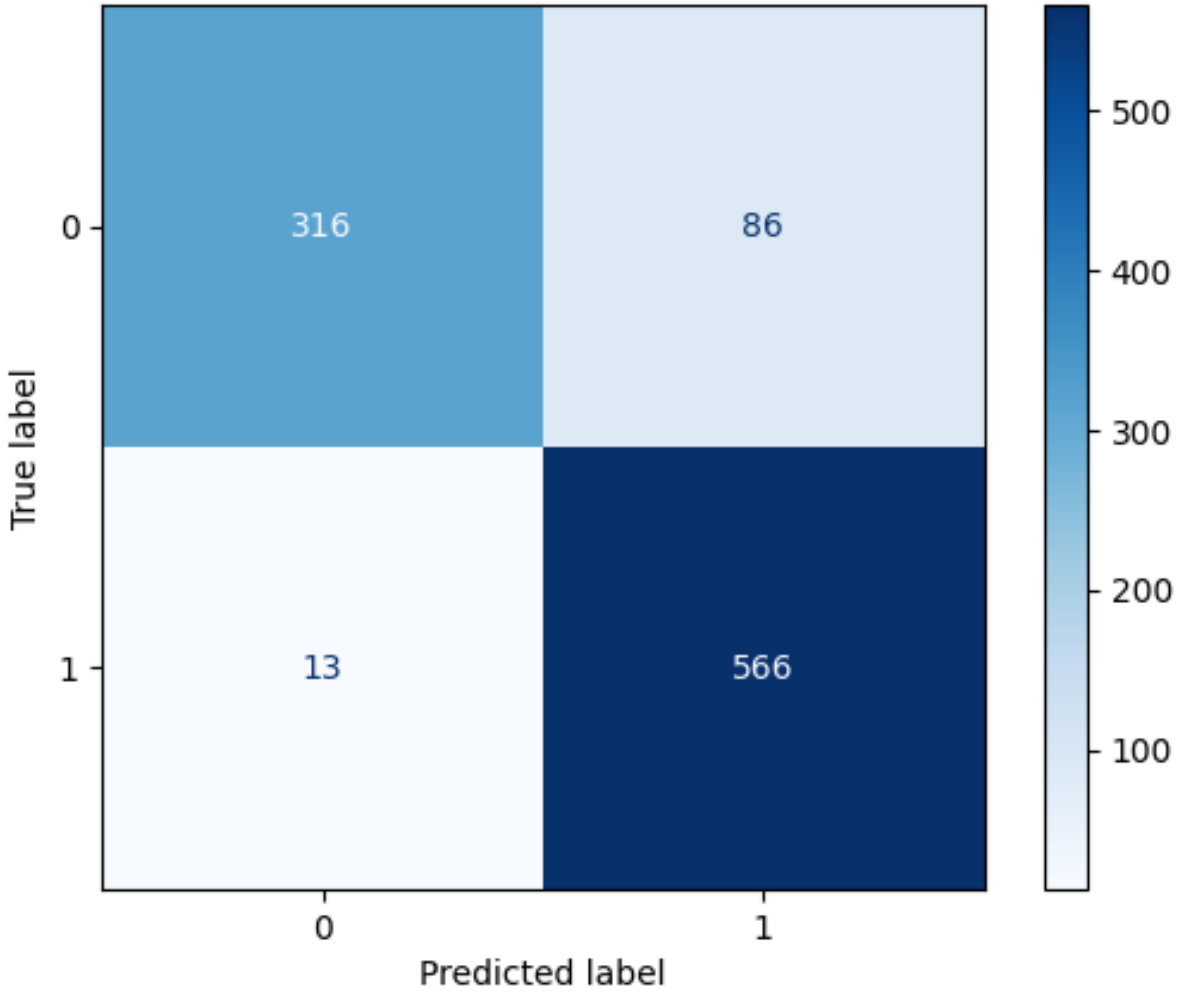
CLASIFICACIÓN

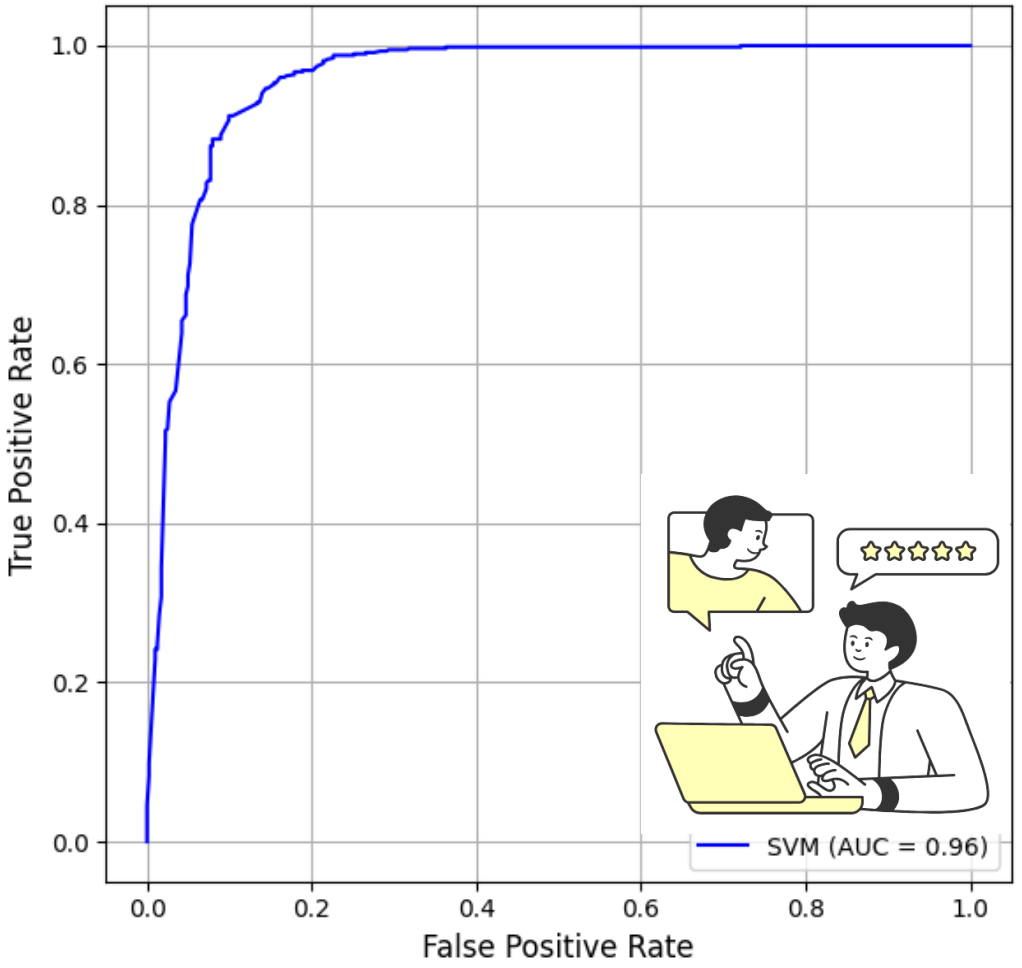
Support Vector Machine





Support Vector Machine





Más de 39.000 alumnos comienzan hoy los exámenes de la EvAU en los campus madrileños

La Comunidad de Madrid comienza hoy las pruebas de Evaluación para el Acceso a la Universidad (EvAU), que se celebrarán a lo largo de esta semana, en las que participan 39.243 alumnos. El consejero de Educación, Ciencia y Universidades, Emilio Viciana, ha visitado esta mañana el campus de Móstoles de la Rey Juan Carlos para conocer de primera mano el desarrollo de la primera jornada.

	Código	TITULACIONES DE GRADO	Grupo 1 Ord.	Centro	Especialidad	NOTA FINAL
0	0001	Arqueología	5.000	Universidad Complutense de Madrid	Humanidades y Artes	5.000
1	0002	Bellas Artes	10.115	Universidad Complutense de Madrid	Humanidades y Artes	7.225
2	0019	Ciencias de las Religiones	5.000	Universidad Complutense de Madrid	Ciencias	5.000
3	0004	Conservación y Restauración del Patrimonio Cul...	10.100	Universidad Complutense de Madrid	Humanidades y Artes	7.214
4	0005	Diseño	11.818	Universidad Complutense de Madrid	Humanidades y Artes	8.441
...	...	...	...	...	...	...
567	0842	Derecho (Semipresencial)	5.000	CEDEU	Ciencias Sociales-Jurídicas	5.000
568	0931	Marketing	5.000	CEDEU	Ciencias Sociales-Jurídicas	5.000
569	0924	Protocolo, Organización de Eventos y Comunicac...	5.000	CEDEU	Ciencias Sociales-Jurídicas	5.000
570	0942	Administración y Dirección de Empresas	5.000	IUNIT	Ciencias Sociales-Jurídicas	5.000
571	0943	Administración y Dirección de Empresas (A dist...	5.000	IUNIT	Ciencias Sociales-Jurídicas	5.000

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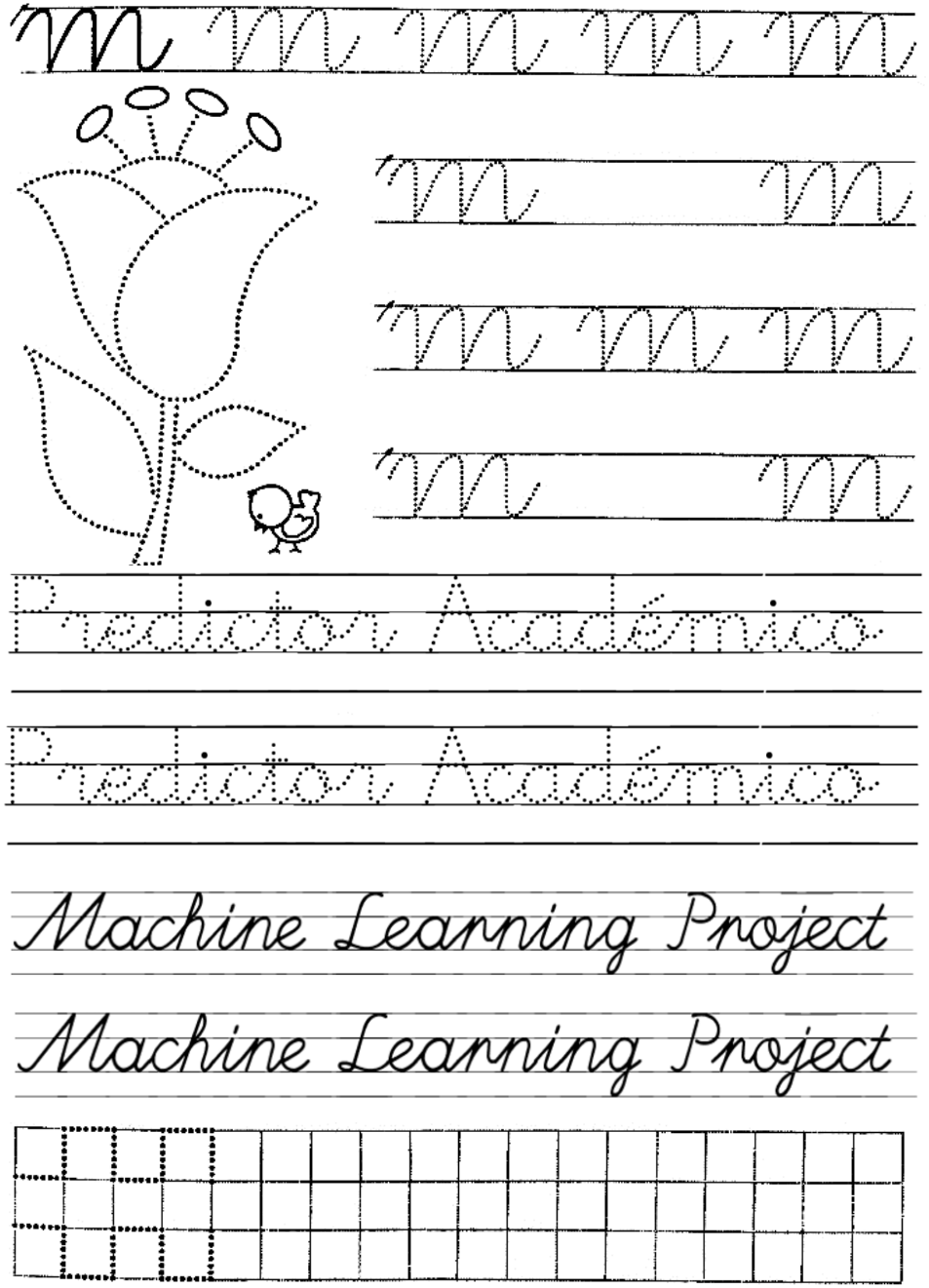
PREDICTOR

Académico

Machine Learning Project

Paula García Fernández

Noviembre 2024