UNIVERSIDAD NACIONAL DE COLOMBIA

SISTEMAS INTELIGENTES
Aplicaciones en Sistemas Gestores de Conocimiento

Julián Moreno

Profesor Asociado
Departamento de Ciencias de la Computación y de la Decisión
jmoreno@unal.edu.co

https://github.com/srobles05/3008410-SistemasInteligentes

Gidia
Grupo de I+D
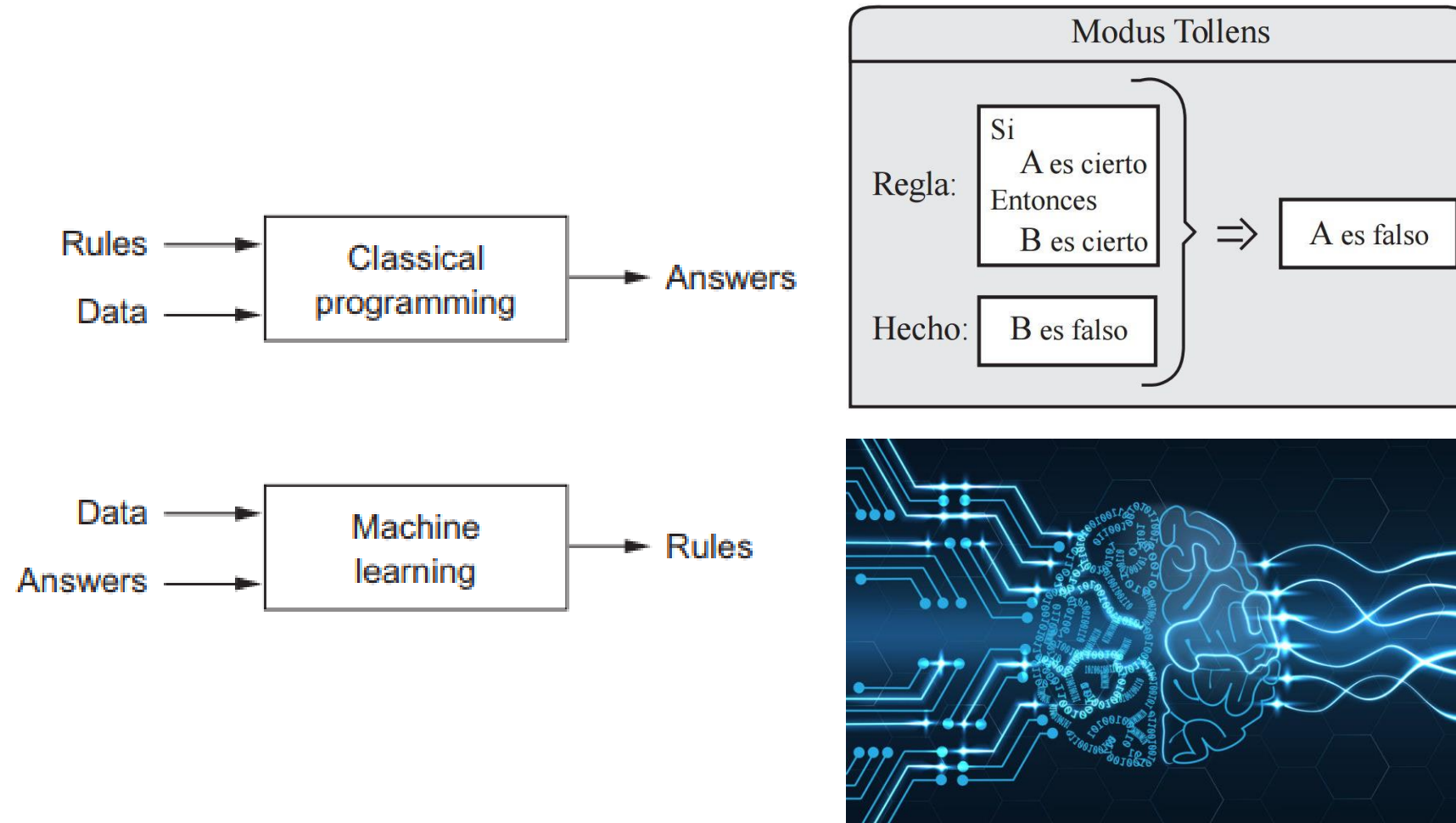en Inteligencia Artificial

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AI + LMS

- Automated homework assessment
- Profiling in forums
- Plagiarism detection
- Face recognition in video
- Automated resources recommendation (content curation)
- Personalization and adaptation

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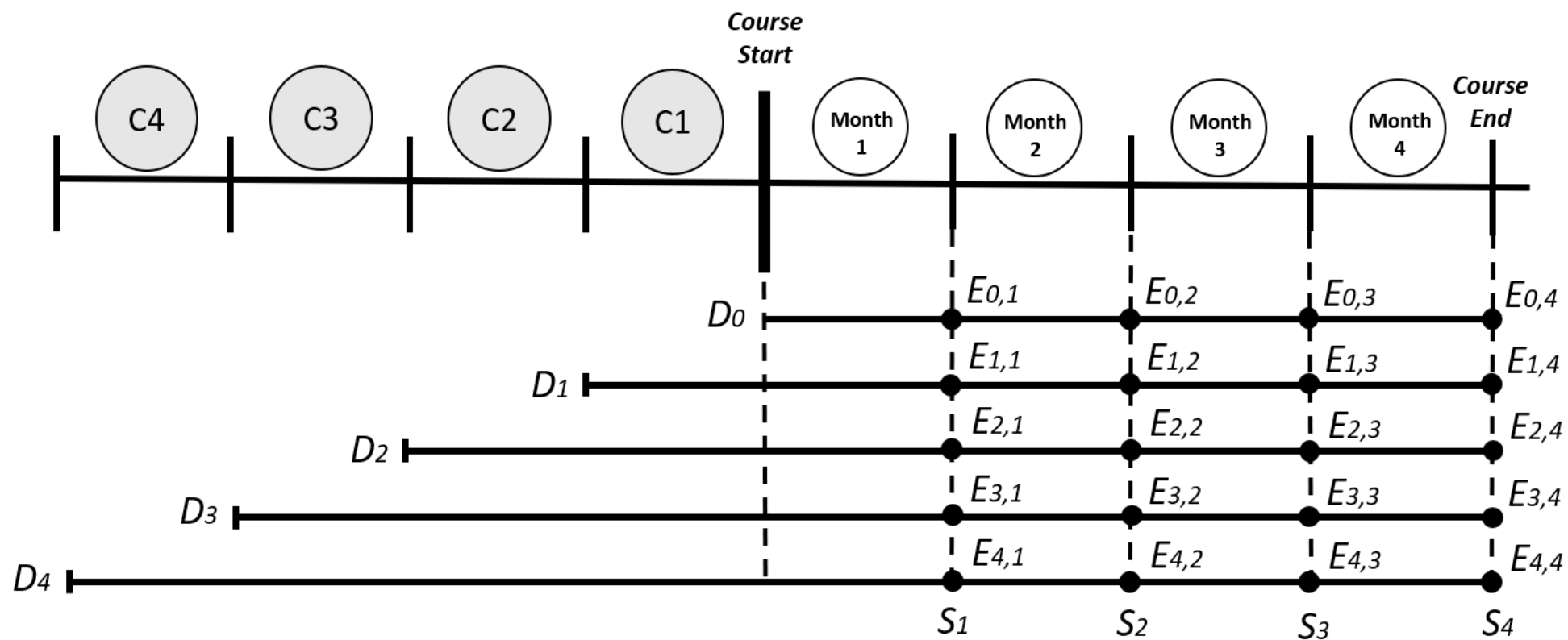# RULE BASED SYSTEMS VS. MACHINE LEARNING

GOAL

To evaluate the performance of five algorithms:
- Neuronal Networks
- Naïve Bayes
- Adaptative Boosting
- Random Forest
- Decision Trees

at different stages of an specific course in order to classify students in any of the following 4 categories related to performance:
- VERY_LOW
- LOW
- MEDIUM
- HIGH

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DATASETS

VARIABLES

#	Variable	Description
1	n_problems_solved	Number of problems solved
2	n_comments_problems	Number of comments/questions done in each problem
3	n_comments_resources	Number of resources commented
4	n_likes_problems	Number of likes to problems
5	n_likes_resources	Number of likes to problems
6	n_problems_attempted	Number of problems attempted
7	n_forum_questions	Number of questions posted in the forum
8	n_forum_responses	Number of responses to questions posted in the forum
9	n_resources_views	Number of resource views
10	n_attempt_try_error	Number of attempts identified as try-error (when the student sends a respond to a question in less than 30 seconds of difference from the previous one)
11	n_attempt_same_incorrect_response	Number of attempts identified with exactly the same error that the previous one
12	avg_problem_solution_time	The elapsed time from opening a problem to getting a response
13	avg_problem_opening	The elapsed time from opening a problem to open another [IN SESSION]
14	n_problems_skipped	Number of problems that the student has decided to "skip"
15	n_days_accessed_in_row	Number of days that student has accessed
N	…	

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RESULTS