

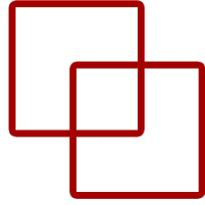
Presentation



Dr. Manuel Castillo-Cara
www.manuelcastillo.eu

Departamento de Inteligencia Artificial
Escuela Técnica Superior de Ingeniería Informática
Universidad Nacional de Educación a Distancia (UNED)

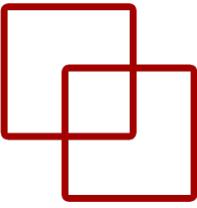
Preliminar



- Improving Deep Learning by Exploiting Synthetic Images © 2024 by Manuel Castillo-Cara is licensed under Attribution-NonCommercial 4.0 International



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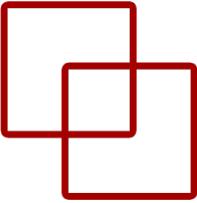


- Curriculum Vitae
- Lines of research
- Indoor Localization
- Synthetic images
- Hybrid Neural Networks
- Seminar Modules
- Resources

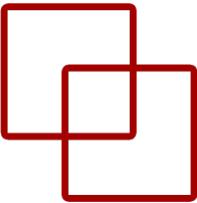


Curriculum Vitae

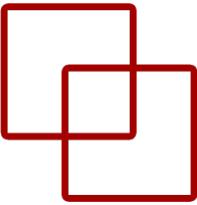
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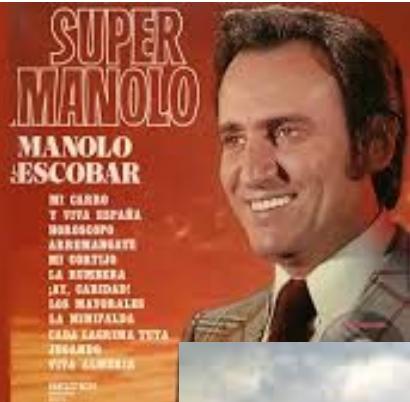
Almería



Almería

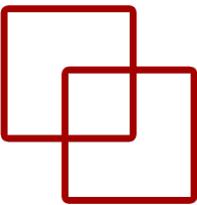


- 01. Pájaro Ciego
- 02. Madrecita M^a Del Carmen
- 03. Que Viva España
- 04. Tu Nombre Anita
- 05. Mi Canción Es Para Ti
- 06. Mi Pequeña Flor
- 07. Que Bonita Es Mi Niña
- 08. Niña De Los Ojos Verdes
- 09. Mi Carru
- 10. Mientras Tú Me Vivirás
- 11. Ni Se Compra Ni Se Vende
- 12. Escribiente
- 13. Los Mayarales
- 14. Ay, Mi Sombra
- 15. Solo Te Pido
- 16. El Positivo No Se Equivoca
- 17. La Morena De Mi Copia
- 18. En Tierra Exótica
- 19. Valencia
- 20. Mi Canción Es Para Ti



Imágenes tomadas de diferentes sitios de internet para una finalidad interna y no pública

Almería



01. Pájaro Ciego
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20. Mi Canción Es Para Ti



Nicolás Salmerón fotografiado por Compañy,
publicado en la revista *Nuevo Mundo*
el 24 de septiembre de 1908.



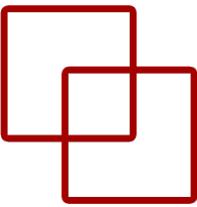
Presidente del Poder Ejecutivo de la
República Española

18 de julio de 1873-7 de septiembre de 1873

Predecesor Francisco Pi y Margall

Sucesor Emilio Castelar

Almería



Emilio Castelar Salmerón fotografiado por Compañy, publicado en la revista *Nuevo Mundo* el 24 de septiembre de 1908.



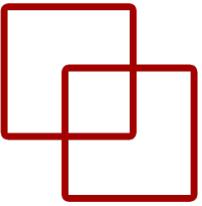
diente del Poder Ejecutivo de la
República Española

io de 1873-7 de septiembre de 1873

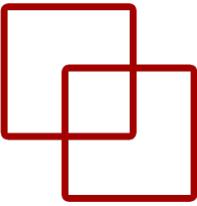
or Francisco Pi y Margall

Emilio Castelar

Doctorado - UCLM Albacete

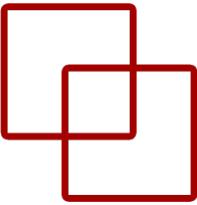


Doctorado - UCLM Albacete



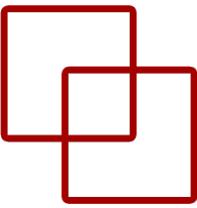
Imágenes tomadas de diferentes sitios de internet para una finalidad interna y no pública

Doctorado - UCLM Albacete



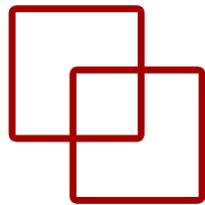
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UNI

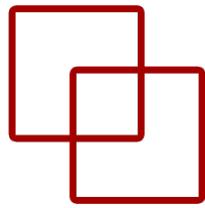


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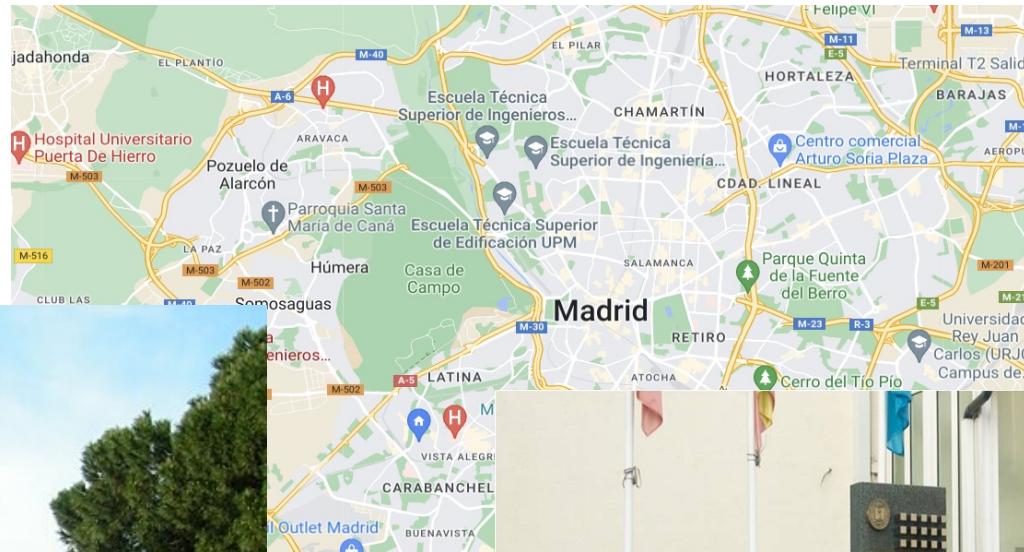
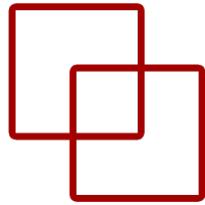
IUT-SCi



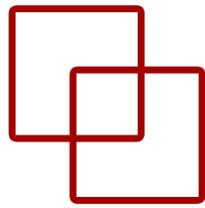
Imágenes tomadas de diferentes sitios de internet para una finalidad interna y no pública



OEG - UPM



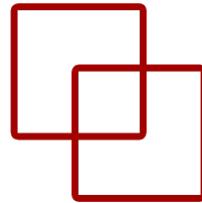
UNED





Estudiar en la UNED

UNED como universidad en Perú



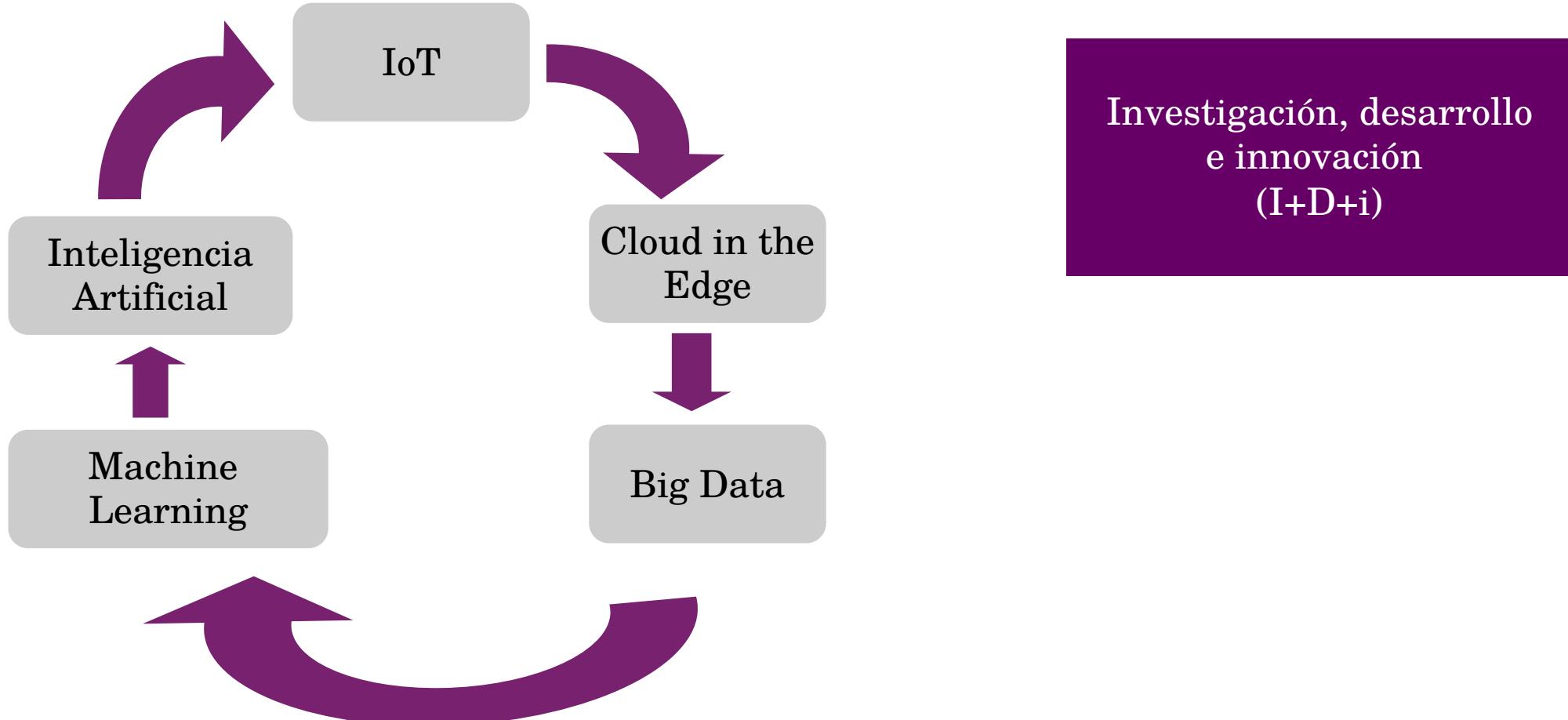
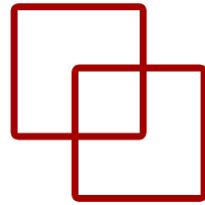
- Universidad pública con representación a nivel mundial.
 - Tasas muy bajas con una exigencia alta.
 - Títulos europeos oficiales
- En Lima, el centro UNED es el centro español en Salaverry.
- Posibilidad de estudiar pregrado y posgrado:
 - Máster de Inteligencia Artificial
 - Otros máster de informática





Líneas de investigación

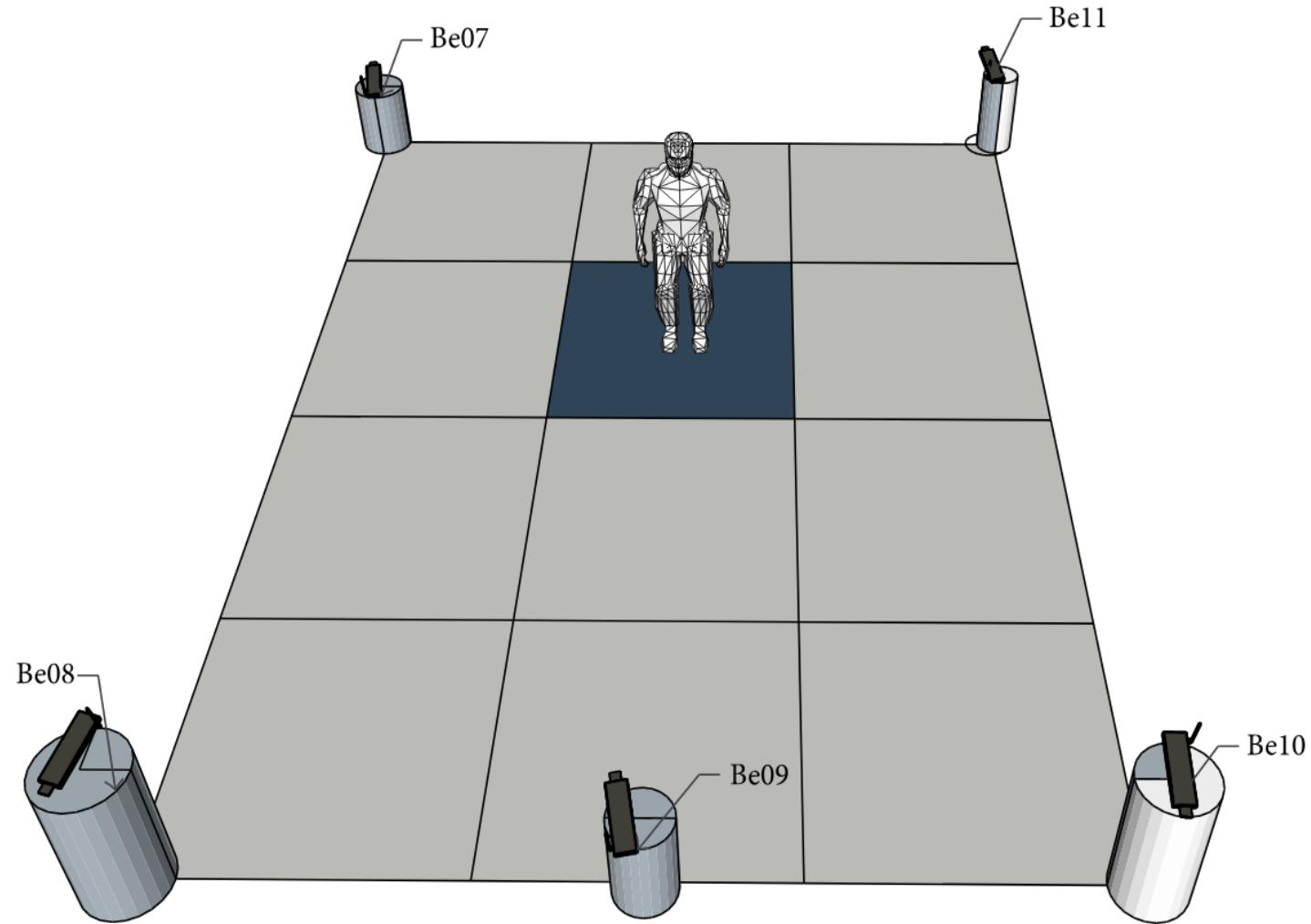
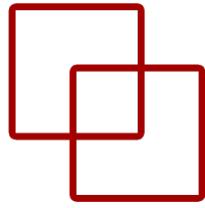
ICBM-AI





Indoor Localization

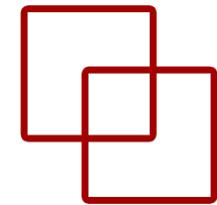
Indoor Localization



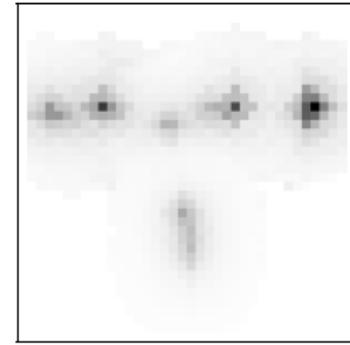
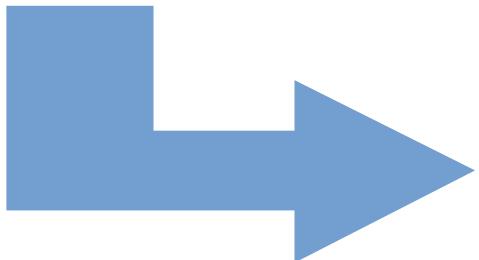


Synthetic images

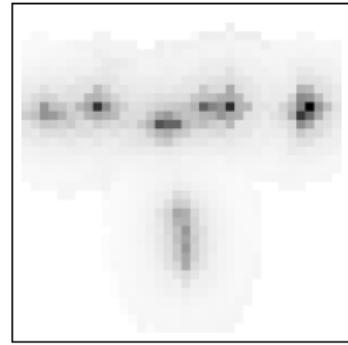
Synthetic images



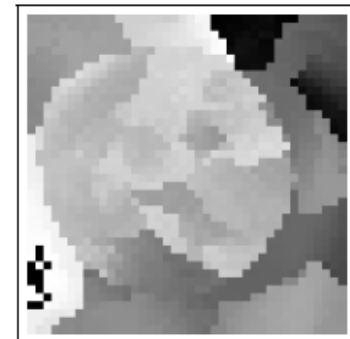
Be07	Be08	Be09	Be10	Be11	Sector
-65	-61	-74	-73	-67	1
-60	-57	-83	-62	-69	2
-66	-70	-78	-63	-73	3
...
-58	-66	-71	-73	-69	14
-60	-62	-73	-69	-57	15



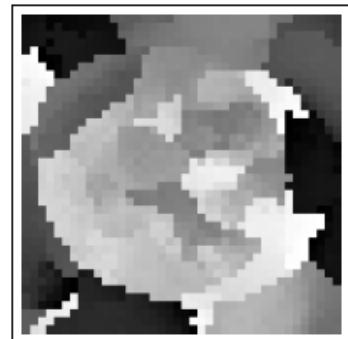
(a) TINTO - Sample 1.



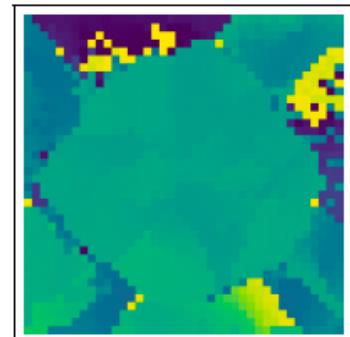
(b) TINTO - Sample 50,000.



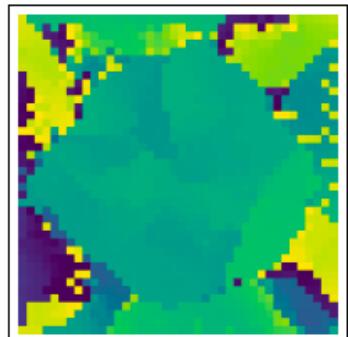
(c) IGTD - Sample 1.



(d) IGTD - Sample 50,000.



(e) REFINED - Sample 1.

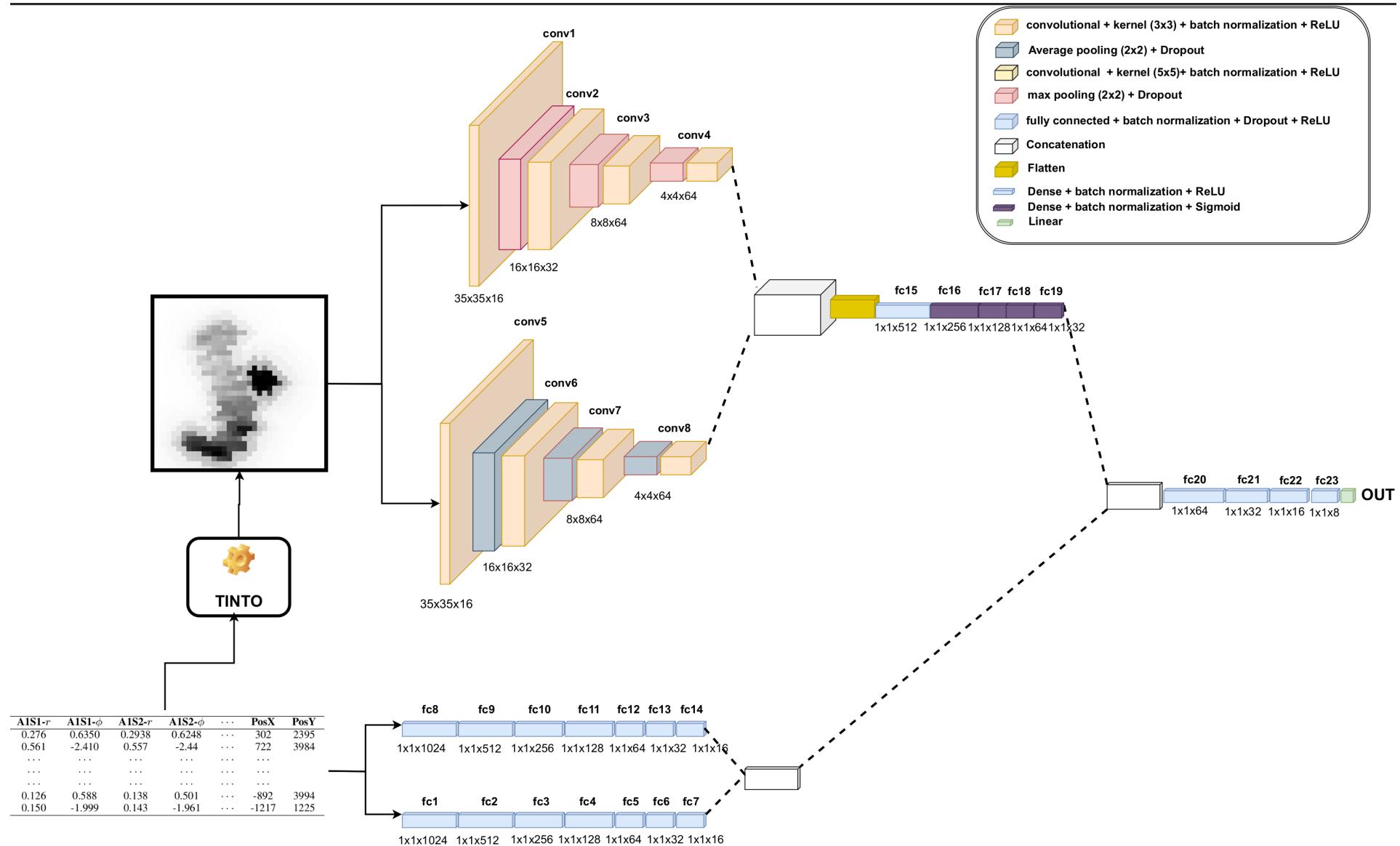
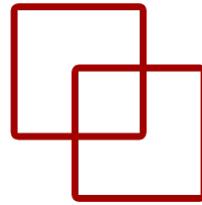


(f) REFINED - Sample 50,000.

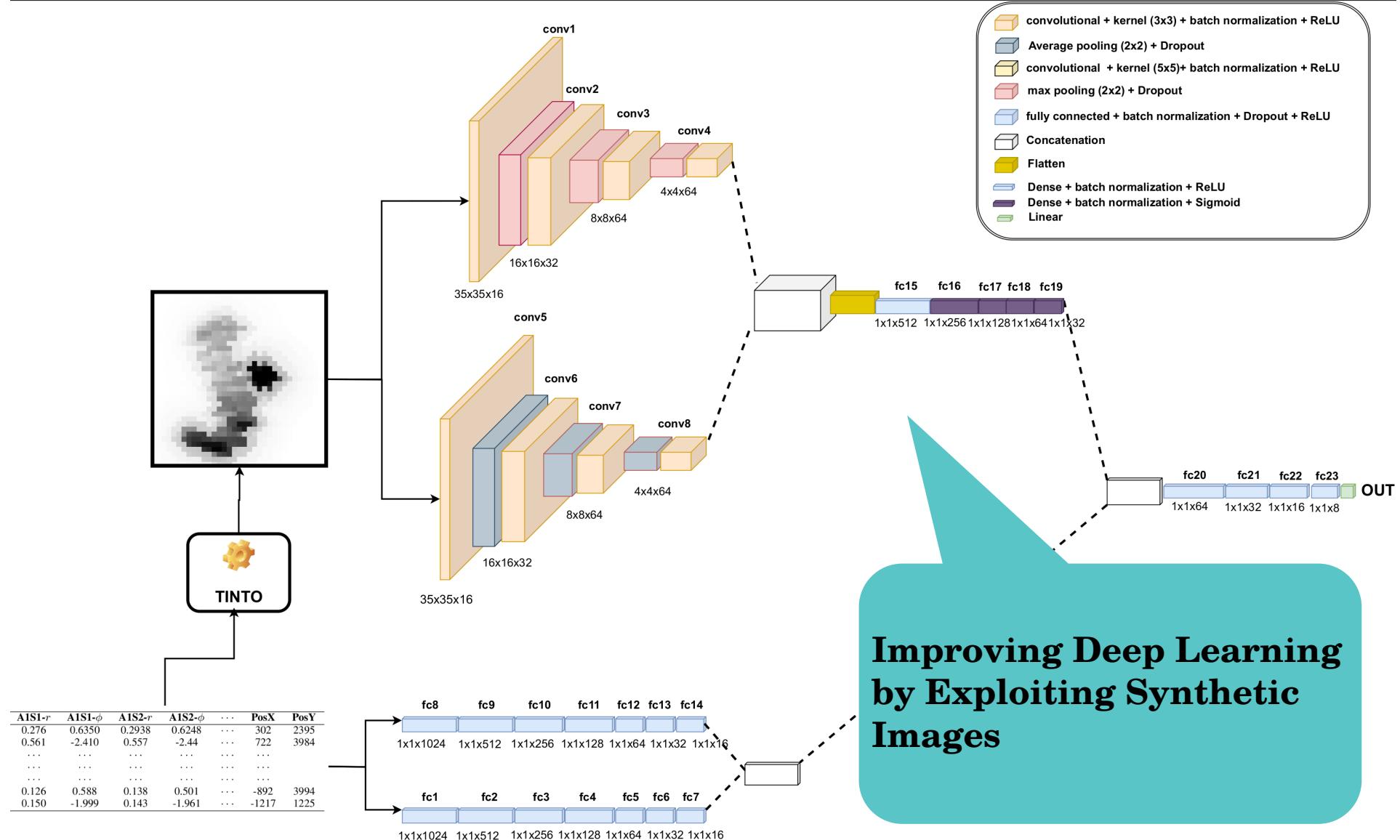
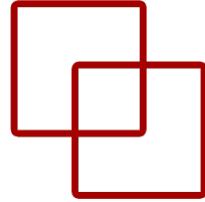


Hybrid Neural Network

Hybrid Neural Network



Redes Neuronales híbridas

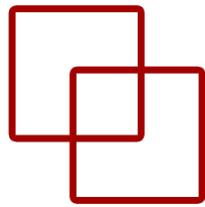




Módulos del seminario

Módulos

MÓDULO 1:
**Convolutional Neural
Networks**

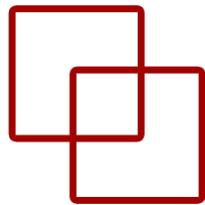


Módulos

MÓDULO 1:
Convolutional Neural
Networks

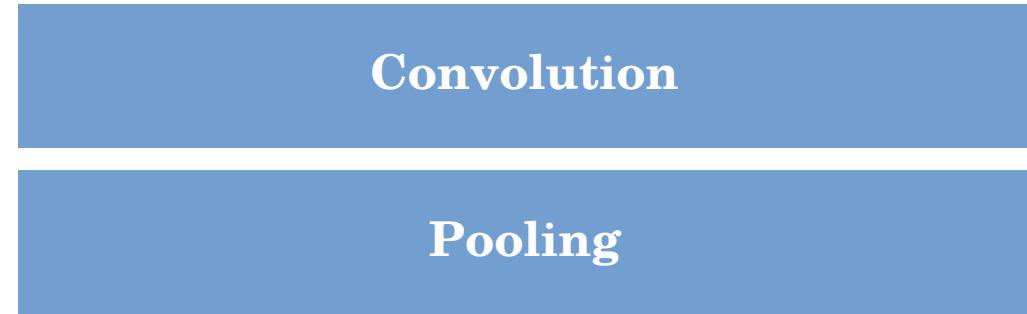


Convolution

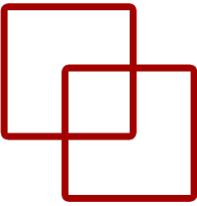


Módulos

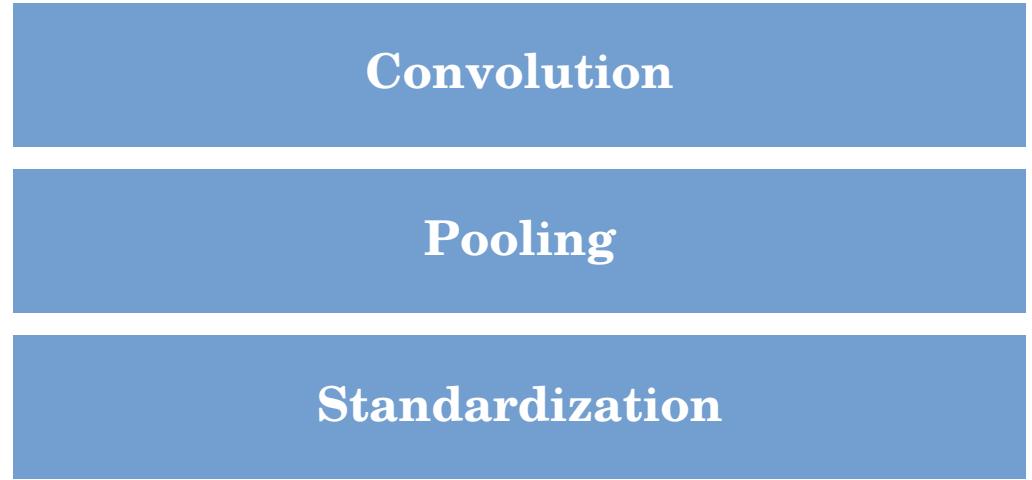
MÓDULO 1:
**Convolutional Neural
Networks**



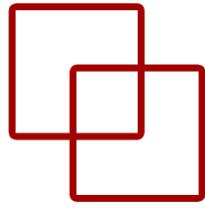
Módulos



MÓDULO 1:
**Convolutional Neural
Networks**



Módulos

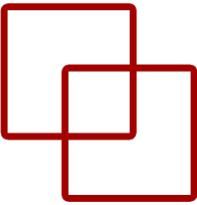


MÓDULO 2:
Transformers



MÓDULO 1:
CNN

Módulos



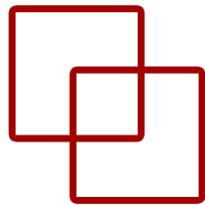
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Transformers



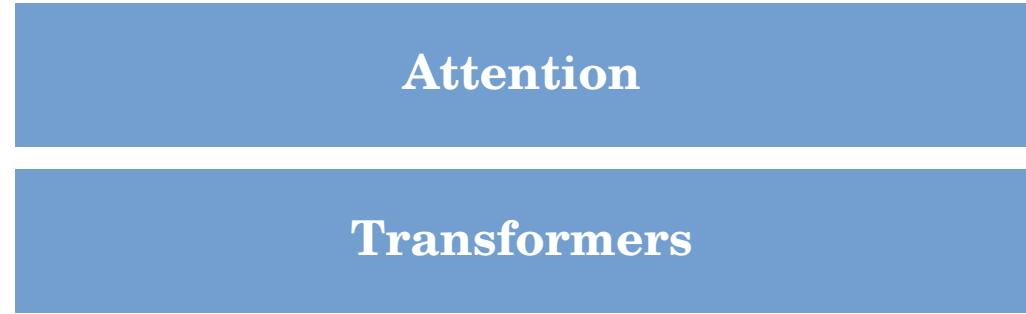
MÓDULO 1:
CNN

Attention

Módulos

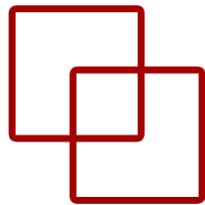


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Transformers

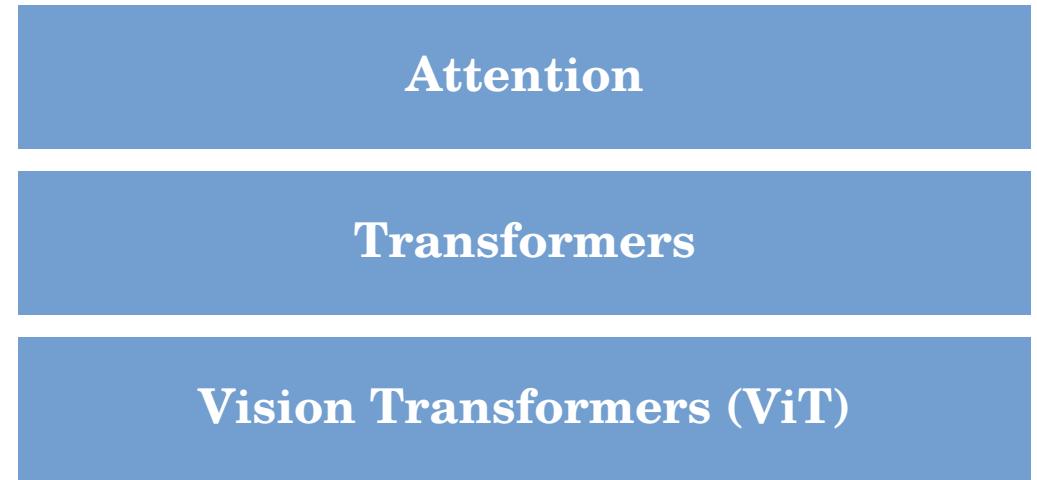


MÓDULO 1:
CNN

Módulos

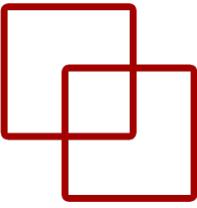


MÓDULO 2:
Transformers



MÓDULO 1:
CNN

Módulos



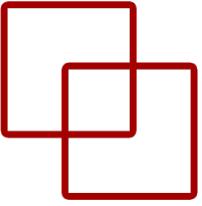
MÓDULO 3:
Synthetic images



MÓDULO 1:
CNN

MÓDULO 2:
Transformers

Módulos



MÓDULO 3:
Synthetic images

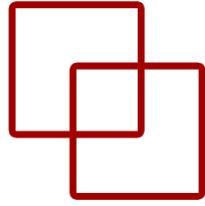


Methods

MÓDULO 1:
CNN

MÓDULO 2:
Transformers

Módulos



MÓDULO 3:
Synthetic images



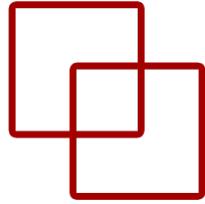
Methods

TINTOlib

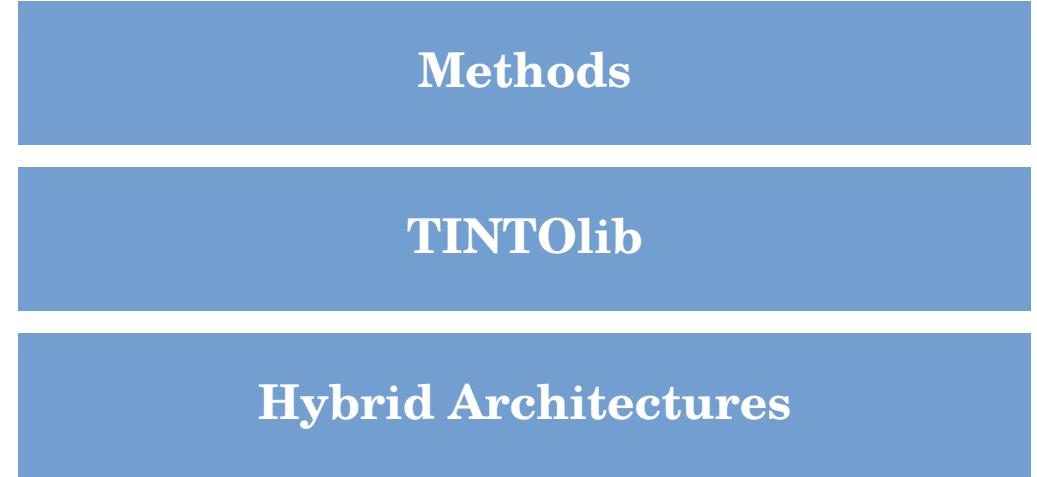
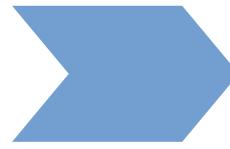
MÓDULO 1:
CNN

MÓDULO 2:
Transformers

Módulos



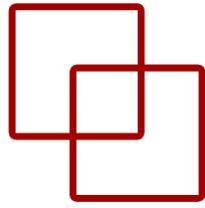
MÓDULO 3:
Synthetic images



MÓDULO 1:
CNN

MÓDULO 2:
Transformers

Módulos



Challenge

MÓDULO 1:
CNN

MÓDULO 2:
Transformers

MÓDULO 3:
Synthetic Images



Resources



Descargar documentos

- Link de descarga:
 - <https://bit.ly/3K886Dd>



¡Gracias!



Dr. Manuel Castillo-Cara

www.manuelcastillo.eu

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