Javier **García Gilabert**

☎ (+34) 618 29 22 09 | ✉ s.javi.com@gmail.com | ⌂ Scholar | Github | Linkedin

Education

Master's Exchange Student
AALTO UNIVERSITY

Helsinki, FI
Sep. 2023 - Dec. 2023

- Took part in advanced Master's courses covering topics such as statistics, computer vision, complex networks, and computational genomics during my Master's exchange program.

Master in Artificial Intelligence
POLYTECHNIC UNIVERSITY OF CATALONIA & UNIVERSITY OF BARCELONA & UNIVERSITY OF ROVIRA I VIRGILI

Barcelona, ES
2022 - Present

Interuniversity master (taught in English).

Bachelor's degree in Data Science
POLYTECHNIC UNIVERSITY OF VALENCIA

Valencia, ES
2018 - 2022

- Got the best student award in Data Science. Honor granted for achieving the highest marks in my university degree.
- Achieved a mean degree mark of 9.3/10.
- Subjects passed with honors: 13.
- Received a Special Mention for my Bachelor Thesis: *Image Captioning using pre-trained GPT-2 models*.

Experience

Research assistant at ROB-IN
MT@UPC (MACHINE TRANSLATION GROUP AT UPC)

Barcelona, ES
Oct. 2022 - Sep. 2023

ROB-IN (Robots for continual personalised assistance that can explain themselves) is a project that seeks to develop new enabling technologies for social and assistive robots to help the elderly. The project aims to develop technologies for personalization, continual dialogue understanding, and explainability. Duties included:

- Developing the dialogue system of the robot using the RASA framework.
- Incorporating Large Language Models (LLMs) for effective communication.
- Investigating the phenomenon of hallucinations in neural machine translation models.

Research Collaboration Fellowship
PRHLT (PATTERN RECOGNITION AND HUMAN LANGUAGE TECHNOLOGY RESEARCH CENTER)

Valencia, ES
Oct. 2021 – Aug. 2022

I was awarded a collaboration fellowship with the PRHLT group, where my focus was on investigating the state-of-the-art encoder-decoder architectures based on neural networks for image captioning. This in-depth research led to the development of my bachelor's thesis, which delved into the findings and insights gained from this fellowship. Advisor: Francisco Casacuberta Nolla

Undergraduate Research Assistant
DEPARTMENT OF APPLIED STATISTICS, OPERATIONS RESEARCH AND QUALITY AT UPV

Valencia, ES
Oct. 2019 - Aug. 2022

My role was mainly as a data scientist, dealing with data collection, processing, analysis, and the application of machine learning techniques to derive meaningful insights and solutions. Duties included:

- Worked on a project on Endometrial Cancer. The purpose was to classify the tumor using magnetic resonance imaging (MRI) with machine learning techniques.
- Involved in a project of the Valencia city council to estimate the number of dumpsters needed in each area of the city of Valencia through machine learning techniques.
- Worked on a project on liver fibrosis with Transient Elastography. The purpose was to improve the grading of significant liver fibrosis.
- Worked in a study of grape production costs for winemaking in Spain.

Academic Work

RESETOX: RE-LEARNING ATTENTION WEIGHTS FOR TOXICITY MITIGATION IN MACHINE TRANSLATION

Date: 19/05/23 **Repository:** https://arxiv.org/abs/2305.11761 Gilabert, Javier García, Carlos Escolano, and Marta R. Costa-Jussà.
"ReSeTOX: Re-learning attention weights for toxicity mitigation in machine translation." arXiv preprint arXiv:2305.11761 (2023).

Comment: Under Review. Presented at Finland AI Day 2023 (event organized by the Finnish Center for Artificial Intelligence FCAI).

EVALUACIÓN DE LA CAPACIDAD PREDICTIVA DE VARIABLES DE TEXTURAS DE IMAGEN DE RESONANCIA
MAGNÉTICA EN CÁNCER DE ENDOMETRIO

Conference: V Jornadas Científicas de Estudiantes de la Sociedad Española de Bioestadística **Location:** Valencia **Date:** 28/01/21
Repository: https://github.com/JAVI897/VJSEB-2021 Javier García Gilabert; Pablo Gil Chong; Aida Villalba Ortiz; Jose Miguel Carot Sierra; Alejandro Rodríguez Ortega; Luis Martí Bonmatí. "V Jornadas Científicas de Estudiantes de la SEB. Book of Abstracts http://www.biometricsociety.net/wp-content/uploads/V_JSEB2021_Book_of_abstracts.pdf". pp. 31-32

Honors & Awards

2022	**Best Student award in Data Science**, Honor granted for achieving the highest marks in my university degree.	*UPV*
2022	**Beca Santander Estudios Progreso 2021-2022,** The "Becas Santander Progreso" program is a project promoted by Banco Santander S.A., whose objective is to facilitate access to education for students with the best academic records at a national level who are pursuing official Bachelor's or Master's degree studies.	*Banco Santander*
2021	**Awards to Graduates of the UPV with Best Academic Records**, Honor granted for achieving the highest marks in the second academic year of my University degree.	*UPV*
2021	**National Datathon Cajamar UniversityHack 2022**, Water prediction model presented in the Cajamar Water Footprint 2022 challenge of the national datathon University Hack 2022. We were able to arrive to the national final round.	*Cajamar*

Certificates

2023	**DeepLearn 2023 summer: 10th International Gran Canaria School on Deep Learning**,	*DeepLearn*
2021	**Improving Deep Neural Networks Hyperparameter Tuning, Regularization and Optimization**,	*Coursera*
2021	**Custom Models, Layers, and Loss Functions with TensorFlow**,	*Coursera*
2021	**Neural Networks and Deep Learning**,	*Coursera*
2021	**Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning**,	*Coursera*
2019	**Deep learning aplicado al análisis de señales e imagen**,	*UPV*
2017	**First Certificate of English (FCE)**,	*Cambridge*

Skills

Programming	Python, R, LaTeX
Frameworks	Scikit-Learn, NumPy, Scipy, Pandas, Keras, PyTorch, Tensorflow, Git, Fairseq.
Languages	• Spanish: Native proficiency. • Catalan: Native proficiency. • English: Full professional proficiency.

Volunteering Activities

Mentor for international exchange students
UPV

MENTOR
2022

Assisting international exchange students in their adaptation to the university and the city of Valencia. As part of the university's MENTOR support program: https://www.upv.es/entidades/OPII/infoweb/pi/info/820230normali.html

Mentor for new university students
UPV

PATU
2019-2021

Advising new Data Science students in their transition to the university, as part of PATU (Programa de Acción Tutorial): https://www.upv.es/perfiles/futuro-alumno/integra-patu-es.html