



Laura Galera

Junior Software Engineer

Contact
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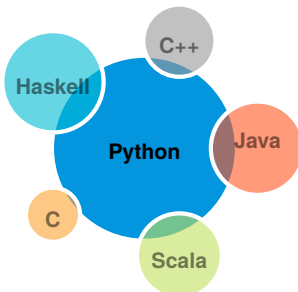
Date of birth
March 2nd, 2000

Location
Girona - Spain

Phone
(+34) 675 91 50 24

Languages
Catalan ★★★★★
Spanish ★★★★★
English ★★★★★

Programming



Presentation

I am a Software Engineer with a M.S. in Artificial Intelligence from the Department of Computer and Systems Sciences at Stockholm University. During my graduate studies, I worked on a collaborative project with Spotify about Explainability in AI for ranking models.

Prior to joining SU, I attained a B.S. in Computer Science with a specialization in Computing from the University of Girona, Spain. During the end of my degree, I spent six months at the Institute for Genomics and Bioinformatics at the University of California, Irvine, conducting my final thesis on the application of Convolutional Neural Networks to medical images. Furthermore, I gained prior experience as a Data Scientist at Additio, where I implemented Machine Learning algorithms to detect patterns in student data stored within our databases.

My interests lie in the fields of databases and machine learning systems. They include data management, scalable data analysis, query processing, optimization for machine learning systems, and graph analysis.

Education

2022 - 2023 **M.S. in Artificial Intelligence** [Stockholm University \(SU\) | Sweden](#)
Grade: 9/10.
Coursework: *Data Mining in Computer and System Sciences, Principles and Foundations of Artificial Intelligence, Big Data with NoSQL Databases, Empirical Research Methodology for Computer and Systems Sciences, Machine Learning, Scalable and Responsible AI in organizations.*
Activities: Member of Student Union DISK.

2018 - 2022 **B.S. in Computer Science** [University of Girona \(UdG\) | Spain](#)
International Competence
Grade: 9.37/10; top 1%.
Coursework: *Calculus, Algebra, Logic and discrete mathematics, Physics and electronics, Statistics, Data structures and algorithms, Digital systems, Databases, Software engineering, Operating systems, Networks, Multimedia and UI, Computation theory, Computer architecture, Declarative programming, Artificial Intelligence, Robotics, Computer graphics, Compilers, Numerical computation, Cryptography.*
Activities: Computer Science Degree mentor. Member of FEMenGIN.

Experience

02/23 - 06/23 **Research Assistant (Master Thesis)** [Spotify | Sweden](#)
Skills: Python, TensorFlow, XAI, Generalized Additive Models, Local Interpretable Model-agnostic Explanations.
• Conducted research in Explainable Artificial Intelligence based on interpretable ranking generalized additive models.
• Explored techniques for adapting Local Interpretable Model-agnostic Explanations to ranking problems.
• Compared different approximations of LIME for ranking to ascertain their accuracy and applicability.

- 02/22 - 07/22 **Research Assistant** [University of California, Irvine \(UCI\)](#) | [U.S.](#)
Skills: Python, TensorFlow, Convolutional Neural Networks.
 • Developed a pipeline to clean and pre-process a data set of colonoscopy images from UCI's center containing polyps and non-polyps.
 • Built a convolutional neural network to classify polyp images; evaluated its performance with two optimizers: Gradient Descent (SGD), and Adam.
 • Created an ensemble model to detect polyps in colonoscopy images combining three pre-trained architectures –VGG, ResNet, DenseNet– with an accuracy of 96%.
- 06/21 - 09/21 **Junior Data Scientist** [Additio](#) | [Spain](#)
Skills: Python, Flask, ElasticSearch, Recommender Systems, Clustering.
 • Performed clustering methods to report groups of students with similar learning weaknesses and recommend personalized tasks from Additio's resource bank.
 • Analyzed features within students in the same cluster to provide an explanation via text.
 • Designed a website using Flask to retrieve and filter data from an Elastic-search database and visualize the model's output.

Honors & Awards

- 2023 **Best Thesis in Informatics** [Patronat UdG](#)
 Awarded to the best bachelor's thesis in Informatics.
- 2023 **Bachelor's Degree Extraordinary Award** [University of Girona](#)
 Awarded to the highest GPA in Computer Science. 56 graduated students.
- 2022 **Beca Josep Maria Ginés i Pous** [Patronat UdG](#)
 Awarded to 2 engineering students to pursue a graduate degree in a foreign university.
- 2022 **Balsells Mobility Award** [Balsells Fellowship](#)
 Awarded to 7 Catalan engineering students to conduct their thesis at UCI.
- 2018 **High School with Honors** [I.N.S. Pla de l'Estany](#)
 Awarded to the best academic transcript.

Certifications

- 2023 **Neo4j Certified Professional** [Neo4j](#)
 Credential ID: 4bbe6414-788d-4ca7-854c-0c938f80a26f.
 No Expiration Date.
- 2021 **C1 Advanced in English** [University of Cambridge](#)
 Credential ID: B6541238.
 No Expiration Date.

Technical Skills

Languages: Python, R, Prolog, Haskell, Scala, Minizinc, Java, JavaFX, C, C++, HTML, CSS, JavaScript, SQL, Cypher, Bash, ANTLR, Android, PHP, MATLAB.
Technologies/Frameworks: Linux, Hadoop, MapReduce, Neo4j, Git, Android Studio, Spring, MongoDB, Elasticsearch, \LaTeX .