



Luis-Miguel López-Santamaría

📍 Irapuato, Guanajuato

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Age: 27 years

PROFILE

A motivated young data scientist focused on everything that is involved, always looking for solutions to make effective decisions. Specialist in data mining, pattern analysis, text classification and machine learning. With a strong database and operating systems management background.

With the ability to adapt to change, a great teammate, with leadership skills and always motivated to take on new challenges, always with great communication and a good work environment.

EDUCATION

Aug. 2021

M.S. in Electrical Engineering

División de Ingenierías Campus Irapuato-Salamanca | Universidad de Guanajuato

Thesis Title: "Automatic Fake News Detection in Online Media"

Advisor: Dr. Juan Carlos Gómez Carranza

Co-advisor: Dr. Saskia Van Amerogen

Dec. 2018

B.S. in Computer Systems Engineering

División de Ingenierías Campus Irapuato-Salamanca | Universidad de Guanajuato

Thesis Title: "Age and Gender Identification in Pinterest Through User-Generated Images and Text"

Advisor: Dr. Juan Carlos Gómez Carranza

WORK EXPERIENCE

Jul. 2018 – Jul. 2019

Back-End Web Developer Jr.

CCSistemas Desarrollo Digital

- Design and implementation of different web-based information systems. Actively participating in decision-making for the search for better performance.
- Design and manipulation of databases using the **MySQL** database manager. Using **SQL** for query building and data extraction.
- Implementation of various modules for information systems, as well as providing support to modules already implemented using programming languages such as **PHP** and **Javascript**.

PROJECTS

Nov. 2017 – Dec. 2018

Design an Implementation of Search Methods by Similarity for Users of Social Media

Fondo Sectorial CONACYT-INEGI, project number: 290910

- **Data collection** from the Pinterest website using a scraper to extract the pins, which are the form of communication between the users of this social network. The **scraper** collected images and text from the website.
- Extraction of different **superficial features** from the text such as words, emojis, hashtags (#), ats(@), etc. With the visual content, a **neural network** ResNet-50 was used to extract the features from the images.
- Implementation of different **machine learning** models such as Support Vector Machine, Logistic Regression, Random Forest, etc. These models were combined with the data collected for the **prediction** of demographic variables.
- Development of an API using **Flask** and in a combination of different pre-trained **machine learning** models. The user can paste text or upload it to predict different demographic variables. The same process can be done with images.

LANGUAGES

• Spanish - Native • English - C1 • Italian - Elementary

SOFTWARE

Python	C/C++	SQL	Matlab
<div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
PHP	HTML	Javascript	R
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TECHNICAL SKILLS

- Machine Learning and Deep Learning libraries (Tensorflow, Keras, scikit-learn, NumPy, NLTK and Matplotlib).
- Database manipulation (MySQL, Microsoft Server and Oracle).
- O.S. management (macOS, Linux and Windows).

CERTIFICATIONS

Computer Science and Programming

MIT | License: 7aadf932eb1439bac4cfc7fed7ab1f

Data Science

UNAM | License: 92N22S3NVF52

JOURNAL REVIEWER

- IEEE Transactions on Pattern Analysis and Machine Intelligence, 2021

JOURNAL PAPERS

- Sánchez, J. C. A., Antonio, A. I. H., González, J. A. R., Belman, H. I. L., **Santamaría, L. M. L.**, & Carranza, J. C. G. (2021). Perfilado demográfico de celebridades en redes sociales. *JÓVENES EN LA CIENCIA*, 10.
<https://bit.ly/3lrFW3W>.
- González, J. A. R., Belman, H. I. L., Sánchez, J. C. A., Antonio, A. I. H., **Santamaría, L. M. L.**, & Carranza, J. C. G. (2021). Identificación de Usuarios entre Redes Sociales. *JÓVENES EN LA CIENCIA*, 10.
<https://bit.ly/3GiSDwd>.
- Gomez, J. C., **López-Santamaría, L. M.**, Ibarra-Manzano, M. A. & Almanza-Ojeda, D. L. (2021). Predicción automática del nivel educativo en usuarios de Twitter en México. *Realidad, Datos y Espacio. Revista Internacional de Estadística y Geografía*, 12(1), (pp. 48-61).
<https://bit.ly/3y18Xxe>.

CONFERENCE PAPERS

- **López-Santamaría, L. M.**, Gomez, J. C., Almanza-Ojeda, D. L., & Ibarra-Manzano, M. A. (2019). Age and gender identification in unbalanced social media. In *2019 International Conference on Electronics, Communications and Computers (CONIELECOMP)* (pp. 74-80). IEEE.
doi: 10.1109/CONIELECOMP.2019.8673125.
- **López-Santamaría, L. M.** & Gomez, J. C. (2018). Age and Gender Identification in Pinterest Through User-Generated Text Comments. In *6º Encuentro Estatal de Jóvenes Investigadores*, 4(2), (pp. 409-415).
<https://bit.ly/3snSG4b>.