

# MARIA DIAZ ALBA

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## EXPERIENCE

### Cordis Corporation

Jul 2025 – Present

*Data Science & AI Engineering (Internship)*

Miami, FL, US

- Supported AI integration and data-driven process optimization for different business challenges.
- **Inventory Forecasting Model for Supply Chain Optimization**
  - \* Developed a machine learning model to forecast product demand and optimize inventory capacity planning to improve stocking accuracy and reduce overages.
- **Web Application for Financial Reconciliation Automation**
  - \* Built a lightweight web-based tool that streamlined the reconciliation of planned vs. actual expenses, eliminating the need for manual spreadsheet manipulation.

### NTT DATA Europe & Latam

May 2025 – Jul 2025

*Digital Technology Consultant - AI/ML & Security (Internship)*

Miami, FL, US

- Participated in the development of an enterprise AI governance and operationalization framework, aligning with industry standards such as the NIST AI Risk Management Framework.
- Performed a technical and strategic evaluation of **Azure's AI Foundry stack** to assess its alignment with the framework and uncover key capabilities and gaps in supporting enterprise AI readiness and compliance.

### TRC Informatica S.L

Mar 2024 – Jul 2024

*Cyber Intelligence / AI Solutions Researcher (Internship)*

Madrid, Spain

- Worked with cyber intelligence team to implement innovative security measures based on threat hunting and leak detection.
- **Credential Risk Assessment Tool**
  - \* Developed an AI-driven tool using ML techniques to assess risk levels for credentials detected in Telegram data leaks, leveraging a custom bot built with the Telegram API to automate data collection, prioritize analysis, and boost evaluation efficiency.

## EDUCATION

### Florida International University

Aug 2024 – Jul 2025

*Master of Science in Applied Artificial Intelligence & IoT, GPA: 3.82/4.0*

Miami, FL, US

- Machine Learning | Deep Learning | Data Engineering | Generative AI
- Expertise in deploying AI solutions for training, fine-tuning, and inference in IoT and other applications.

### Universidad de Alcalá de Henares

Sep 2020 – May 2024

*B.Sc. in Forensic Sciences and Technologies, GPA: 8.2/10.0*

Madrid, Spain

- Digital Investigation on Mobile Devices and Apps | Cybersecurity | Procedural and Criminal Law
- Thesis: *OSINT Tools for Social Media Investigations* under the supervision of [Prof. Manuel Sánchez Rubio](#).

### Université de Lausanne

Aug 2023 – Feb 2024

*B.Sc. in Forensic Sciences and Technologies, GPA: 3.90/4.0*

Lausanne, Switzerland

- ERASMUS+ Program (Exchange Scholarship)

## PUBLICATIONS

### AI-Driven Biometric Intelligence: Gender Prediction via CNN-Based Fingerprint Analysis.

2024-2025

Book chapter to be included in the forthcoming volume *AI-Enabled Forensic Investigations Network in Digital Sciences*, edited by [Prof. S. S. Iyengar](#) (Springer Nature).

- Explored the application of deep learning architectures (CNNs) that capture distinctive features for gender prediction from fingerprint images, emphasizing their relevance in forensic science and biometric security.

## CONFERENCES

### Speaker at AI-Enabled Forensic Investigations Network in Digital Sciences Conference

May 2025

"AI-Driven Biometric Intelligence: Gender Prediction via CNN-Based Fingerprint Analysis" - FIU Miami, USA

### Speaker at CNN-CERT (National Cryptologic Center) Cyberdefense Conference

Nov 2024

"Development of a Telegram tool for detecting exfiltrated passwords" - TRC Informatica S.L

Madrid, Spain

TECHNICAL SKILLS

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**Programming Languages:** Python, SQL, MATLAB  
**Libraries:** TensorFlow, PyTorch, Streamlit, scikit-learn, Keras, NumPy, PySpark, Pandas, Matplotlib  
**Software:** Azure AI Foundry, Power Automate , Power BI, Excel, Tableau, GitHub, VS Code, ChatGPT, JupyterNb, L<sup>A</sup>T<sub>E</sub>X  
**Hardware:** Raspberry Pi, Arduino

CERTIFICATES

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<b>Azure AI Fundamentals (AI-900)</b> Microsoft Certified	Dec 2024
<b>Azure Big Data (DP-900)</b> Microsoft Certified	Feb 2025

LANGUAGE PROFICIENCY

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**English** (fluent), **French** (advanced), **Spanish** (native)

Last updated on November 12, 2025. Certificates, references and transcripts available upon request.