

FRANCO IVÁN AIDUCIC

PKI, CRYPTOGRAPHY & MACHINE IDENTITY

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SUMMARY

Senior Security Engineer with 10+ years in PKI, applied cryptography and digital identity for critical and financial infrastructure. Specialist across the cryptographic identity lifecycle — X.509, HSM/KMS, certificate automation, mTLS and machine/workload identity — with hands-on delivery of human authentication: MFA, passwordless/FIDO2 and OIDC/OAuth2/SAML federation. Experienced operating under regulated frameworks such as PCI DSS, GDPR and FINMA.

PROFESSIONAL EXPERIENCE

Sr. PKI & MFA Systems Engineer — Bolsas y Mercados Españoles (SIX Group) 09/2023 – Present
Identity & Access Management Dept. — Cryptographic Services Team · Madrid, Spain

- Interim team lead for the Cryptographic Services team: operations, priorities and stakeholder coordination until a permanent manager was appointed.
- Lead PKI, PQC and certificate lifecycle management initiatives across business-critical systems, including domain- and service-based CA architectures.
- Machine/workload identity: certificate issuance, renewal and mTLS for services and containerized platforms (Kubernetes/OpenShift), with automation of the certificate lifecycle.
- Human authentication and federation: MFA, passwordless/FIDO2 and OIDC/OAuth2/SAML integration of applications with Entra ID and ADFS.
- Subject-matter expert for PKI, MFA and cryptographic controls, ensuring compliance with PCI DSS and internal security standards.

Sr. Cybersecurity Analyst — Cryptography Specialist · YPF S.A. 11/2021 – 08/2023
Cybersecurity Infrastructure Dept. · Argentina

- Led the cryptography team for Argentina's largest oil & gas company; administered the corporate PKI (AD CS) and HSM estate.
- Managed Privileged Access Management (One Identity SafeGuard, Delinea) and cloud key/certificate material across AWS and Azure.
- Delivered network and service authentication, passwordless and MFA, data encryption and Zero Trust initiatives across IT and business units.

PKI Systems Leader — Digital Signatures Infrastructure · Secretariat of Public Innovation 05/2020 – 10/2021
National Digital Signature Authority · Argentina

- Managed PKI systems and delivered new services for Argentina's National Digital Signature Root and issuing Certification Authorities.
- Defined project goals and technical requirements, planned technical-team activities and oversaw outsourced services to ensure compliance.

PKI Systems Analyst & Administrator — Digital Signatures · Ministry of Modernization 04/2014 – 03/2019
National Digital Signature Authority · Argentina

- Full administration of Argentina's official digital-signature infrastructure: certificate lifecycle, Certification Authorities, HSM, AD CS and PKI.
- Implemented security policies covering asset and access control, physical/logical security, redundancy, contingency and continuity of operations.

EDUCATION

Master's Degree in Cybersecurity — Universidad Complutense de Madrid (UCM) 2026 – Present
Mechanical Engineer (5-year degree) — Universidad Tecnológica Nacional (FRBA) 2013 – 2018

CERTIFICATIONS & TRAINING

CISSP training · AZ-500 Microsoft Azure Security · AWS Security Fundamentals · Windows Server AD Certificate Services (Microsoft).

DevSecOps (UNSTA, 2022) · Project Management (UTN, 2020) · Professional Analysis & Trading (BME, 2025).

TECHNICAL SKILLS

PKI & Cryptography: CA/RA design, X.509, CMS, CRL/OCSP, key management, PQC; certificate enrollment & automation (SCEP, EST, CEP/CES, REST API) — EJBCA, AD CS, Entrust, DigiCert, SwissSign

HSM & Key Management: Thales, Securosys; AWS KMS, Azure Key Vault

Machine / Workload Identity: certificate automation, mTLS, lifecycle management; Docker, Kubernetes, OpenShift

Authentication & Federation: MFA, passwordless, FIDO2/WebAuthn, OAuth 2.0, OpenID Connect, SAML; Entra ID, ADFS, Active Directory, app-to-IdP integration

Privileged Access & Cloud: One Identity SafeGuard, Delinea; AWS, Azure

Compliance & Automation: PCI DSS, GDPR, FINMA; Python, PowerShell, C#/.NET; SIEM, EDR

Languages: Spanish (native), English (C1), Italian (B1)