

Dr. Jesus Molina

Industrial cybersecurity expert with experience leading the protection of critical infrastructures.



Specialties

- IT & OT Cybersecurity
- Critical Infrastructure
- Standards & Regulations (IEC 62443, NIS2, NIST)
- Business Development
- Technological Innovation
- Rapid Prototyping

Impact in Numbers

20+ years of professional experience
100+ international presentations
3000+ academic citations
70+ technical publications
5 cybersecurity patents

Interests

- Vibe coding • Sailing
- Entrepreneurship
- Gardening • Meditation

Languages

Spanish Native
English Fluent
Catalan Fluent

[jesusmolinaauth](#)

[nomellames](#)

[molinajesus](#)

ABOUT ME

- Over 15 years as a leader in OT and IT cybersecurity on a global level
- Business developer of Unidirectional Gateways with proven success in the railway, energy, and airport sectors
- Expert in standards & regulations such as IEC 62443, NIS2, NIST, TS-50701. Board member and Chair at the Trusted Computing Group. Chair of the IIoT Consortium
- Author of the first vertical IEC 62443 cybersecurity course for railway systems (UPC)
- International speaker at events such as S4x25, RSA, ENISA Rail, Sikkerhetsfestivalen, Blackhat, and Defcon

PROFESSIONAL PROFILE

2017–2025	Director of Industrial Security WATERFALL SECURITY SOLUTIONS · Global <ul style="list-style-type: none">• Drove the rail vertical, achieving over €5 M in revenue.• Forged strategic opportunities and strengthened relationships with key clients.• Developed technical materials for critical sectors: rail, aviation, and energy.• Served on international committees (UITP, EE-ISAC).
2011–2017	Consultant & Founder JADEBRAIN INC. · San Francisco <ul style="list-style-type: none">• Provided boutique consulting services to companies such as Fujitsu and Huawei.• Represented clients at the Industrial Internet Consortium (IIC).• Led IoT/IIoT workshops for the RSA Conference.
2007–2011	Security Researcher FUJITSU LABORATORIES OF AMERICA · San Francisco <ul style="list-style-type: none">• Designed prototypes and secured patents in hardware/software security.

EDUCATION

2007	Ph.D. in Electrical Engineering UNIVERSITY OF MARYLAND · Intrusion Detection	
2001	M.S. in Electrical Engineering UNIVERSITY OF MARYLAND · Hardware Modules	
1999	B.Sc. in Telecommunications Engineering UNIVERSITAT POLITÈCNICA DE CATALUNYA · Authentication	

SELECTED PUBLICATIONS & TALKS

S4x25 Conference	The Case for Vertical Specific (Rail) OT Security Training Materials
ERA-ENISA 2024	Training on CLC TS 50701
Cybertek 2024	NIST for OT Professionals
Sikkerhetsfestivalen 2024	Replicating a 10-Year-Old OT Cyberattack Using AI
eBook and Webinar	Cybersecurity in Power Generation – Applying 62443 Standards