

# OTHONAS SOULTATOS

Senior Software Engineer | Systems Engineer | Edge Computing & Cybersecurity  
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## PROFESSIONAL SUMMARY

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Senior Software Engineer and Systems Engineer with 10+ years of experience in distributed systems, edge computing, and cybersecurity. Specializing in Go, cloud-native architectures, and Linux-based edge platforms. Currently contributing to the open-source LF Edge/EVE (Edge Virtualization Engine) project, building and maintaining edge computing infrastructure that powers IoT and enterprise edge deployments worldwide. Strong track record in real-time data platforms, microservices design, Kafka-based messaging, and database optimization. MSc in Cybersecurity with 13 peer-reviewed publications. Experienced in release engineering, CI/CD automation, and cross-functional collaboration in open-source ecosystems.

## CORE COMPETENCIES

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**Programming Languages:** Go (Golang) 7+ years, Java 10+ years, Python, Bash, SQL, NoSQL

**Edge & Cloud:** EVE-OS, LF Edge, Edge Virtualization, AWS (S3, DynamoDB, SQS, EventBridge), GCP, OpenStack, Docker, Kubernetes, Terraform

**Systems Engineering:** Linux Systems, Edge Device Management, Virtualization (VMs, Containers), Secure Boot, TPM, Network Configuration, Release Engineering

**Data & Messaging:** Apache Kafka, MQTT, MongoDB, PostgreSQL, DynamoDB, Real-Time Data Pipelines

**Cybersecurity:** Secure Protocols, Data Integrity, Threat Modeling, Certificate Management, Zero-Trust Architecture

**Software Architecture:** Microservices, Distributed Systems, Event-Driven Architecture, REST APIs, gRPC, CI/CD Pipelines

**Collaboration & Leadership:** Open-Source Contribution, Code Reviews, Technical Mentorship, Agile/Scrum, Cross-Functional Teams, Confluence, Jira, Git

## PROFESSIONAL EXPERIENCE

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### Senior Systems Engineer (Contractor)

ZEDEDA — LF Edge/EVE Open-Source Project

April 2025 – Present

- Contribute to EVE-OS (Edge Virtualization Engine), an open-source Linux-based OS under the LF Edge umbrella, designed to manage and orchestrate edge computing workloads across IoT and enterprise deployments.
- Develop and maintain core Go-based system services for edge device lifecycle management, including secure boot processes, network configuration, and container/VM orchestration on edge hardware.
- Drive release engineering for EVE-OS LTS releases, automating PR triage, Dev-to-ST handoff workflows, and Confluence documentation for cross-team coordination.
- Design and implement CI/CD pipeline improvements and automated testing frameworks to ensure quality and reliability across multiple hardware architectures (x86, ARM64).
- Collaborate with distributed open-source contributors and internal teams on architectural decisions, code reviews, and feature development for the edge platform.
- Build AI-assisted developer tooling and coding agent skills (Claude Code, OpenCode) to accelerate spec-driven development workflows within the team.
- Investigate and resolve platform compatibility issues across diverse edge hardware (including Raspberry Pi, industrial gateways), ensuring broad device support.

**Technologies:** Go, Python, Bash, EVE-OS, Docker, Kubernetes, GitHub Actions, CI/CD, Linux, ARM64, x86, Confluence, Jira, Kafka, gRPC, REST APIs

### Senior Software Engineer

Freelance / Self-Employed

October 2022 – March 2025

- Developed and maintained distributed backend applications in Go for various clients, focusing on scalability, real-time data processing, and high-availability architectures.
- Designed and implemented multithreaded backend services to process high-frequency data streams for production systems.
- Leveraged AWS cloud services (S3, DynamoDB, SQS, EventBridge) for scalable deployments and event-driven architectures.
- Mentored junior engineers, fostering a collaborative environment and improving code quality through detailed reviews and architectural discussions.

**Technologies:** Go, Kafka, MongoDB, PostgreSQL, AWS (S3, DynamoDB, SQS, EventBridge), Docker, Kubernetes

## Senior Backend Engineer

*Axiomatics*

April 2022 – September 2022

- Developed and enhanced backend services for Axiomatics' Orchestrated Authorization platform, an enterprise-grade attribute-based access control (ABAC) solution for fine-grained, policy-driven authorization.
- Contributed to core authorization engine improvements, ensuring scalability and reliability for real-time access control decisions across microservices, APIs, and cloud environments.
- Collaborated with cross-functional teams on API design and integration of Zero Trust authorization policies for enterprise customers.

**Technologies:** Go, Java, ABAC/XACML, Distributed Systems, REST APIs, Docker, CI/CD

## Senior Software Engineer

*Sphynx Technology Solutions*

April 2020 – March 2022

- Architected and built distributed backend services in Go for a real-time cybersecurity platform, processing high-frequency threat data from multiple live feeds.
- Implemented Kafka-based event-driven messaging pipelines, improving data flow reliability and reducing end-to-end processing latency.
- Optimized MongoDB and PostgreSQL query performance through indexing strategies and schema redesign, reducing average query times.
- Collaborated on microservices architectural decisions, ensuring fault-tolerant and resilient system design across distributed components.
- Integrated 3rd-party live data feeds into the platform, ensuring data accuracy and performance for real-time security monitoring and alerting.

**Technologies:** Go, Apache Kafka, MongoDB, PostgreSQL, Docker, REST APIs, Microservices

## Software Engineer / Researcher

*ICS-FORTH (Institute of Computer Science)*

November 2016 – March 2020

- Designed and developed secure microservices for distributed IoT and cloud computing research projects, using Go and cloud-native technologies.
- Managed containerized applications on Kubernetes clusters, optimizing backend systems for performance, scalability, and reliability.
- Co-authored 10+ peer-reviewed papers on IoT security, data integrity, and sustainable computing, published in IEEE and ACM venues.
- Contributed to EU-funded research projects involving large-scale distributed systems and secure communication protocols.

**Technologies:** Go, Node.js, Kubernetes, Docker, PostgreSQL, REST APIs, Python, Cloud Computing, IoT Protocols

## R&D Software Engineer

*Technical University of Crete*

December 2014 – December 2015

- Developed secure communication protocols for data transmission in constrained IoT environments using Go and Node.js.
- Conducted research on lightweight data handling and data integrity mechanisms, contributing to published findings.

**Technologies:** Go, Node.js, IoT, Embedded Systems, Secure Protocols

## EDUCATION

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### MSc in Cybersecurity

Hellenic Mediterranean University, Heraklion | 2022 – 2024

### BSc in Computer Science

University of Crete, Heraklion | 2008 – 2014

## PUBLICATIONS

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13 peer-reviewed publications in IEEE, ACM, and Springer venues covering IoT security, sustainable computing, distributed systems, and edge computing. Selected DOIs:

10.1145/3364181 • 10.1109/TSUSC.2019.2914917 • 10.1016/j.comcom.2018.02.0079 •  
10.1016/j.future.2016.05.023 • 10.1109/GLOBECOM38437.2019.9013147 • 10.1007/978-3-030-42051-2\_14 •  
10.1109/DCOSS.2019.00091 • 10.1109/CAMAD.2018.8514937 • 10.1109/GLOCOM.2016.7842383 •  
10.1007/978-3-319-24018-3\_18 • 10.1109/ETFA.2014.7005233

## KEY PROJECTS & OPEN-SOURCE CONTRIBUTIONS

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- **LF Edge/EVE-OS:** Active contributor to the Edge Virtualization Engine, an open-source edge computing OS under the Linux Foundation. Focused on system services, release engineering, and hardware compatibility.
- **AI-Native Developer Tooling:** Designed and built a suite of AI coding agent skills (init, zed-plan, zed-execute) for spec-driven development, adopted by the ZEDEDATA AI-Native Team Transition Playbook.
- **Real-Time Cybersecurity Platform:** Architected Go-based backend services processing live threat feeds with Kafka pipelines and MongoDB/PostgreSQL storage for Sphynx Technology Solutions.
- **IoT Research Platforms:** Developed secure microservices and communication protocols for EU-funded distributed IoT research at ICS-FORTH, contributing to 13 peer-reviewed publications.
- **Cloud Infrastructure & Database Optimization:** Designed scalable AWS deployments (S3, DynamoDB, EventBridge) and optimized database performance through indexing and schema tuning.