Vasileios SKEVAKIS

Chania, Greece | (+30) 695 595 3319 | vskevakis@gmail.com
linkedin.com/in/vskevakis | github.com/vskevakis

Technical Skills

Languages & Frameworks: TypeScript, Python, C#, VB.NET; React, Next.js, .NET Core, .NET Framework
Application Development: REST APIs, full-stack web applications, Windows desktop applications, cross-platform PWAs (iOS & Android)
Architecture & Infrastructure: Microservices & cloud-native architecture, Kubernetes, Docker, CI/CD, self-hosted PaaS; Proxmox VE cluster administration, HPC & GPU cluster networking and administration (SDN, vLANs, DNS), research server infrastructure management
Data & AI: PostgreSQL, MSSQL, ETL pipelines, data harmonisation & quality, vector stores / RAG, LLM integration & agentic workflows (MCP)
IoT & Digital Twins: ThingsBoard, Trendz, real-time telemetry, process modelling & simulation, LCA

Experience

Lead Software Architect, Viridiance Insights (VIRID) Apr 2026 – Present
Shareholder in this spin-off company of indigo and the Technical University of Crete Chania, Greece

- **Product Engineering:** Driving the technical development of VIRID's software portfolio, transferring indigo's research outcomes into commercially exploitable products.
- **vi-Sim:** Process modelling and simulation platform that models entire value chains via **Material Flow Networks**, with mass/energy balance simulation, KPI and **LCA** modules.
- **vi-Cortex:** Cognitive **digital-twin** platform for industrial process optimisation; real-time monitoring via hard and soft sensors, anomaly detection, automated mitigation, and safe optimisation on shadow copies of the twin.
- **vi-Trace:** Blockchain-enabled **Digital Product Passport** (DPP) platform.
- **vi-Cloud:** Architected the shared cloud infrastructure underpinning all three products.

Senior Software Engineer / Researcher, indigo (Technical University of Crete) Mar 2023 – Present
Senior since Apr 2026; Junior Software Engineer, Mar 2023 – Apr 2026 Chania, Greece

- **Technical Coordination:** Coordinating the shared indigo/VIRID ICT team on architecture, code quality, and delivery across EU-funded projects and VIRID's products.
- **Data Ingestion & Harmonisation (ParkIn | Green Fund GR):** Architected the back-end for the ParkIn Observatory; designed **ETL pipelines** to ingest crowd-sourced user inputs and mobile telemetry, standardising heterogeneous inputs into a common schema for environmental analysis.
- **Data Transparency & Reproducibility (ROBINSON | Horizon 2020):** Engineered the project's **Replication Tool**, centralising pilot data, technical specifications, and technology inventories so that pilot outcomes can be reproduced at other sites.
- **Circular Solutions Planning (CSSBoost | Horizon Europe):** Developing a **Multi-Criteria Decision Support System** (MCDSS) and a comprehensive Database of Circular Solutions; engineering the digital Application Planning Toolkit and the PSM modelling tool and API used by project partners for pilot modelling.
- **Secure Data Lifecycles (AquaSPICE | Horizon 2020):** Containerised legacy APIs for air-gapped environments (TUPRAS), ensuring **data quality assessment**, absolute integrity, and regulatory compliance for proprietary industrial data.
- **IoT Telemetry Platform:** Architecting a centralised **ThingsBoard** and **Trendz** ecosystem that collects data from multi-sensor networks, with real-time ingestion and visualisation.
- **HPC & AI Infrastructure:** Orchestrating the TUC 4.0 Node Admin project; architecting high-performance clusters with Proxmox virtualisation, software-defined networking (DNS/vLANs), and granular multi-tenant access control for research teams.
- **Cluster Management:** Engineered a 3-node Proxmox cluster; managing mission-critical VMs, automated off-site backups, and live migrations to ensure maximum uptime and zero-data-loss.

Mandatory Military Service, Hellenic Armed Forces Jun 2022 – Mar 2023

Software Engineer (Associate), Meet My Farm P.C. Dec 2021 – Jun 2022

- Developed a high-performance social media feed using React, focusing on a responsive and user-friendly UX.
- Optimised production readiness by implementing full Docker containerisation and CI/CD deployment pipelines.

President / IT Director (Volunteer), Entasi Radio 93.5 FM Jul 2015 – Jul 2019

- Elected President of the non-profit organisation; managed strategic growth and legal compliance while leading the technical department in modernising the station's Linux/Docker-based infrastructure.

Publications & Research

Scheduling High-Affinity Services in Kubernetes 2025
V. Skevakis, E.G.M. Petrakis. Proc. Int. Conf. on Emerging Internet, Data & Web Technologies (EIDWT), Springer; DOI: 10.1007/978-3-031-86149-9_39

- First author; scheduling strategy that co-locates high-affinity (heavily communicating) services to cut inter-node traffic and response latency.

ModSoft-HP: Fuzzy Microservices Placement in Kubernetes 2023
E.G.M. Petrakis, V. Skevakis, P. Eliades, A. Aznavouridis, et al. Electronics 2024, 13(1), 65; DOI: 10.3390/electronics13010065

- Fuzzy logic-based placement strategy and customised scheduler optimising resource allocation and performance in high-pressure cloud environments.

Thesis: Fuzzy Service Placement Strategies in Kubernetes Technical University of Crete
DOI: 10.26233/heallink.tuc.92796

- Designed a custom Kubernetes scheduler using **Fuzzy Graph Clustering** on **Google Cloud Platform**; optimised service placement to minimise egress traffic and response latency while maintaining cost efficiency.

Other Projects

Entasi Radio Mobile App (PWA with Capacitor, iOS & Android) App Store | Play Store

- Built and published a cross-platform PWA, packaged with Capacitor for the App Store and Google Play, streaming live audio to thousands of listeners worldwide.

Automated Metadata & RDS Processor (Python)

- Built a Python application utilising audio scraping and identification APIs to automate stream metadata and RDS.

Education

Technical University of Crete Chania, Greece
Integrated Masters Degree in Computer Engineering ECTS: B+
Relevant Coursework: Distributed Systems, Services in Cloud and Fog, Operating Systems, Computer Networks, Database Systems, Computer Architecture.

Languages

Greek: Native **English:** Full Professional Proficiency (C2)