# ALEXANDROS ANTONOV

## Senior Software Engineer, Ph.D. Candidate

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🔗 alex-antonov-96a250105    ⭘ AAlexandros

Software engineer and Ph.D. candidate with 7+ years of experience building scalable, reliable systems. Passionate about applying research-driven innovation to deliver robust and practical solutions.

## TECH STACK

Java | Python | C# | C++
Groovy | Bash

Spring | Wicket | Hibernate
Flask | SQLAlchemy
Pydantic | REST APIs

PostgreSQL | MySQL
MongoDB

Docker
GitHub Actions CI/CD
Microsoft Azure | Linux
WebSphere

React.js | Angular | HTML
CSS | JavaScript

## OTHER SKILLS

Certified Scrum Master (PSM I)
Teamwork
Problem Solving
Mentoring | Presenting
Attention to Detail

## LANGUAGES

**English**: Proficiency Cert. (C2)
**Greek**: Native Speaker
**Russian**: Native Speaker

## PROJECTS

- **Crypto Games** ⭘ : Two blockchain-based games (Solidity + React/web3.js).
- **Bloom Filter-Based Multicast** ⭘ : Prototype ICN **Publish/Subscribe** infrastructure developed as part of EU project **POINT**.
- **Social Network Recommendation**: Dataset analysis to optimize item diffusion/recommendations.

## EXPERIENCE

### Lead Developer | KMicro - AI GRC Platform

📅 2024-Present      📍 Costa Mesa, CA (Remote)

- Co-led development of an AI-driven platform that generates and revises security policies, answers questionnaires, and performs compliance assessments — reducing manual research for security teams.
- Designed and deployed the system architecture and infrastructure (Flask backend, SQLAlchemy, Azure Infrastructure, Docker, CI/CD with GitHub Actions).
- Implemented Secure Controls Framework (SCF) integration, loading **thousands of controls** into memory for real-time mapping across NIST, ISO, and other frameworks — the core engine of the platform.
- Adapted and deployed a customized version of Prowler (open-source security tool) to Azure, extending functionality to meet enterprise compliance needs.
- Improved system performance through ORM optimizations and efficient AI logic design, reducing excessive database calls and ensuring scalability.
- Served as go-to technical lead, trusted to make architectural decisions and mentor teammates, while also managing DevOps deployments.

### Software Engineer | Interamerican - Digital Solutions Department

📅 2016–2020      📍 Athens, Greece

- Developed and maintained the company's customer-facing web portal (Java, Apache Wicket, Angular, Hibernate, Oracle), serving up to **1.5M+ insured clients**.
- Acted as the integration bridge between the frontend portal and numerous enterprise systems (CRM, payment gateways, legacy insurance platforms, healthcare back-office), ensuring seamless data exchange and customer transactions.
- Designed and consumed REST APIs to enable features such as online claims submission, policy management, and digital payments, expanding customer self-service capabilities.
- Collaborated in a **6-person agile team** (4 devs, PO, BA) and fulfilled occasional Scrum Master duties to streamline delivery.
- Mentored and onboarded **4 junior engineers** through pair-programming, code reviews, and knowledge-sharing sessions, accelerating team ramp-up and code quality.
- Conducted R&D on new technologies to align with evolving departmental needs.

## PUBLICATIONS

**SecureCyclon: Dependable Peer Sampling**, ICDCS 2023 — Resilient peer-sampling mechanism (funded by **Cardano**).

**CliqueSensus: Ephemeral Overlays for Committee-based PoS Blockchains**, Middleware 2025 — Efficient consensus messaging protocol (founded by **Ethereum Foundation**).

## EDUCATION

**Ph.D. Candidate in Computer Science** | Athens University of Economics and Business
*Title: Dependable Overlays for Blockchains*    📅 2021 – Ongoing    📍 Athens, Greece
**M.Sc. in Computer Science** | Athens University of Economics and Business
GPA: 9.33    📅 2020 – 2021    📍 Athens, Greece
**B.Sc. in Computer Science** | Athens University of Economics and Business
GPA: 7.1    📅 2011 – 2016    📍 Athens, Greece