

# ALEXANDROS ANTONOV

Senior Software Engineer, Ph.D. Candidate

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Athens, Greece

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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

- JavaPythonC#C++
- GroovyBash
- SpringWicketHibernate
- FlaskSQLAlchemy
- PydanticREST APIs
- PostgreSQLMySQL
- MongoDB
- Docker
- GitHub Actions CI/CD
- Microsoft AzureLinux
- WebSphere
- React.jsAngularHTML
- CSSJavaScript

## OTHER SKILLS

- Certified Scrum Master (PSM I)
- Teamwork
- Problem Solving
- MentoringPresenting
- 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 for automated policy generation, questionnaire answering, and compliance assessments.
  - Designed and deployed the system architecture (Flask, Spring Boot, SQLAlchemy, Azure Infrastructure, Docker, CI/CD with GitHub Actions).
  - Built a full Stripe integration for pricing plans, subscriptions, invoicing, and usage-based billing — ensuring full data synchronization.
  - 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