# Kyriakos Chatzidimitriou, Ph.D.

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Nationality: Greek

## **Experience & Employment**

## 2017 – now Co-founder, Managing Partner and Full stack developer, Cyclopt P.C.

## Brief Description of Duties:

- Administrative duties of a managing partner in a Greek Private Company
- Full-stack developer of Cyclopt's GitHub applications based on the MERN stack:
  - https://bot.cyclopt.com (GitHub app)
  - o <a href="https://qaas.cyclopt.com">https://qaas.cyclopt.com</a> (GitHub oauth)
- Developer of the open source packages:
  - jssa JavaScript Static Analyzer: Five (5) different JS static analysis tools merged into one with CLI support (<a href="https://github.com/cyclopt/jssa">https://github.com/cyclopt/jssa</a>)
  - js-starter-kit Opinionated starting kit based on the MERN stack (<a href="https://github.com/cyclopt/js-starter-kit">https://github.com/cyclopt/js-starter-kit</a>)

# 2012 – **now Fellow Researcher, Software Architect and Instructor,** Intelligent Systems and Software Engineering Labgroup, Information Processing Laboratory, Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece R&D Projects Involved:

- eeRIS electric energy Residential Informational System (National, EPAnEK, 2018-2021).
   The eeRIS platform will be able to offer detailed information to an electric energy consumer, correlating his/her consumption to the use of specific household appliances.
- VITAL Versatile Internet of Things in Agriculture (National, EPAnEK, 2018-2020). The aim
  of the project is to create an innovative system that exploits the Internet of Things (IoT)
  technology.
- **CIA Continuous Implicit Authentication** (Privately funded, 2018-2019) is a project that aims to do behavioral biometrics through gestures in mobile devices and kiosks.
- SEAF Sustainable Energy Asset Evaluation and Optimisation Framework (European, H2020). SEAF bridges the gap between contractors and investors in Sustainable Energy Assets (SEA) through the development of a holistic IT Platform.
- Mobile-Age (European, H2020). Mobile Age project focuses on open government data, mobile technology, and the provision of public services in relation to Europe's elderly population.
- S-CASE Scaffolding Scalable Software Services (European, FP7). The goal of S-CASE is to
  accelerate the software development lifecycle for cloud services by introducing a new agile
  prototyping paradigm that automates the process of mapping user requirements to
  concrete software specifications and generates operational code (RESTful services)

### Brief Description of Duties:

- Group's Software Architect
- Idea inception and software architect for Cenote an open source Big Data Management System for event-based analytics (<a href="https://github.com/AuthEceSoftEng/cenote">https://github.com/AuthEceSoftEng/cenote</a>)
- Idea inception and full-stack developer of npm-miner Static code analysis system of the npm registry (https://github.com/AuthEceSoftEng/npm-miner)
- Technical Lead of the S-CASE consortium
- Research management of the project on Continuous Implicit Authentication on touch devices
- Participation on the research and teaching activities of the lab
- Solo instructor in 1 undergraduate course (Software Engineering) and co-tutor in 4
  postgraduate courses (Data Mining, Big Data Analytics, Databases and Data Mining,
  Techniques for Software Design and Development) for a total of 9 semesters.
- Grant proposal writing

## Brief Description of Duties:

- Full stack developer on the MEAN stack (MySQL, Express, Angular.js, Node) for an Energy Management System
- R&D on sensor fault diagnosis

## 2007 – 2012 Research Assistant, Developer and Teaching Assistant

- 1) Intelligent Systems and Software Engineering Labgroup, Information Processing Laboratory, Dept. of Electrical and Computer Engineering, Aristotle University of Thessaloniki, Greece
- 2) Information Technology Institute, Centre for Research and Technology Hellas, Thermi, GR **R&D Projects Involved:** 
  - Cassandra A multivariate platform for assessing the impact of strategic decisions in electrical power systems (European, FP7-ICT, 2011-2014). Cassandra aims to build a platform for the realistic modeling of the energy market stakeholders, also involving smallscale consumers

## **Brief Description of Duties:**

- Participation in the project Cassandra and on various internal and private projects (telemedicine, machine learning on retail data etc.)
- Technical Lead of the Cassandra consortium
- Research on Trading Agents and participation on the Trading Agent Competition with team
- Participation on the research and teaching activities of the lab
- Teaching assistant in 2 undergraduate courses (Software Engineering, Data structures) for a total of 9 semesters
- Grant proposal writing
- Support the quality assurance activities of the department
- 2006 2007Mandatory Military Service (with commendation), Hellenic Army, Signals Arm
- 2004 2006**Teaching Assistant,** Computer Science Department, Colorado State University, US

## Brief Description of Duties:

Teaching assistant in 2 undergraduate courses (CS370 Software Systems and Architecture, CS301 Foundations of Computer Science) for a total of 4 semesters.

#### 2002 - 2003Intern, ALTEC SA, Thessaloniki, Greece

## **Brief Description of Duties:**

- Java-Oracle developer at ALTEC's pilot for the EU funded project (FP5) "Agent Academy"
- Production of research papers and deliverables

#### Intern, Elcoteq, Pecs, Hungary 2001

## **Brief Description of Duties:**

- Development, testing and documentation of software, which implements communication between Panasonic SMT machines and PC, through the serial communication port.
- Measuring RF circuits of mobile phones

## Education

2007 - 2012PhD in Electrical and Computer Engineering, Dept. of Electrical and Computer Engineering, AUTH,

Thessaloniki, Greece

Dissertation: "Reinforcement Learning and Evolutionary Computation Mechanisms for

Autonomous Agents"

**Grade:** Unanimous Excellent

2004 - 2006 Master of Science in Computer Science, Dept. of Computer Science, Colorado State University,

Fort Collins, CO, USA

Thesis: "Robust and Interpretable Statistical Models for Predicting the Intensification of Tropical Cyclones"

Grade: 4.0/4.0

1997 – 2003 5-year Diploma in Electrical and Computer Engineering, Dept. of Electrical and Computer

Engineering, AUTH, Thessaloniki, Greece

Thesis: "Design and Development of a Multi-Agent System for Managing the Supply Chain"

**Grade:** 8.53/10.00 (Excellent)

Rank: 2<sup>nd</sup> out of 194

## **Other Training**

- 2017-2018 Deep Learning Nanodegree, Udacity
- Feb. 2016 Instructor Certification, Software Carpentry and Data Carpentry
- 2011-2017 Life-long learning through online courses: Fractals and Scaling Big Data Integration and Processing Big Data Modeling and Management Systems Introduction to Big Data Learning from Data How to Build a Startup Social Network Analysis An Introduction to Interactive Programming in Python Introduction to Complexity Digital Analytics Fundamentals Introduction to Databases Neural Networks for Machine Learning Engineering Long-Lasting SaaS Machine Learning
  - 2002 Diplôme d'Études de Langue Française I (DELF I), Level A1
  - 2000 Degree in Recorder, New Conservatoire of Thessaloniki, Grade: Excellent
  - 1998 Certificate of Proficiency in English, University of Cambridge, Level C2

## **Skills**

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Web Development	MERN & MEAN stacks (MongoDB, Express, AngularJS, React, Node.js), Java RESTful web services, Amazon Web Services, Heroku PaaS, Google App Engine, Firebase, applied web application security, behavior driven development, test driven development, API modeling languages (raml, swagger), GatsbyJS, GraphQL		
Software Development	git, SonarQube, Jenkins CI, Docker		
Programming Languages	JavaScript, Python, R, Java, C#, NetLogo		
Databases	SQL language, MySQL, Postgresql, MongoDB, CouchDB, Cassandra		
Big Data	Map-Reduce, Hadoop, MongoDB, Spark, Kafka, Storm, Cassandra		
Administrative Experience	Cyclopt managing partner, software quality assurance manager		
Advices & Guidance	Besides being the Software Architect of a team of more than 10 people, I		
	have co-supervised more than 45 diploma thesis and master thesis students and currently co-supervising a PhD student.		
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## **Selected Awards & Distinctions**

- 2018 5<sup>th</sup> prize at the 8<sup>th</sup> innovation and technology competition "NBG Business Seeds" of the National Bank of Greece out of 361 participants
- 2017 **2**<sup>nd</sup> **place** at the 10<sup>th</sup> innovation competition "e-nnovation", research stream category, out of 100 participants organized by the Athens University of Economics & Business
- 2012 1<sup>st</sup> place at the international Trading Agent Competition, Ad Auctions game with agent Mertacor
- 2011 3<sup>rd</sup> place at the Ms Pac-Man vs. Ghosts competition, Congress on Evolutionary Computation with Diploma Thesis student Giorgos Matzoulas
- 2010 3<sup>rd</sup> place at the international Trading Agent Competition, Ad Auctions game with agent Mertacor
- 2009 Excellence Scholarship Award for PhD candidates, Research Committee, AUTH
- 2006 Awarded a commendation as an exemplary Private by the Hellenic Army

## **Publications**

Besides my PhD dissertation, my MSc thesis and my Diploma thesis, I have co-authored **1 book**, **9 journal articles**, **17 conference papers**, **3 other publications** and **2 datasets**. My citations and h-indices are found in the table below:

Source	Documents	Total Citations	h-index
Scopus	21	100	5
Web of Science	13	46	4
Google Scholar	31	213	8

## Referees

Available upon request