

# Christina Zacharoula Chaniotaki

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## Education

### University of Southern California (USC)

Los Angeles, California

PH.D. IN COMPUTER SCIENCE

Aug 2023 – present

- **GPA:** 3.66
- **Research Interests:** Program Analysis, Software Testing, Web Services.
- **Advisor:** Prof. William G.J. Halfond.

### Athens University of Economics and Business (AUEB)

Athens, Greece

MSC IN INFORMATION SYSTEMS

Oct 2019 – Jan 2022

- **GPA:** 3.5 (8.74/10) – "Distinction."
- **Thesis:** "An Empirical Investigation of Boilerplate Code," supervised by Prof. Diomidis Spinellis.

### Athens University of Economics and Business (AUEB)

Athens, Greece

BSC IN MANAGEMENT SCIENCE AND TECHNOLOGY

Sep 2014 – Oct 2018

- **GPA:** 3.71 (9.28/10) – Ranked 1<sup>st</sup> of 48 students in cohort.
- **Major:** Software Engineering and Data Science.
- **Thesis:** "DNA – Distributed Network Architecture," co-authored with Konstantinos Kopanidis and supervised by Prof. Panos Louridas, Prof. George Xylomenos and, asst. Prof. Dimitris Mitropoulos.

## Professional Experience

### University of Southern California (USC)

Los Angeles, California

GRADUATE TEACHING ASSISTANT (PART-TIME)

Aug 2023 – present

- **Spring 2024, 2025:** CSCI 310 - Software Engineering, Prof. William G.J. Halfond: Maintaining grade records, overseeing the re-grading processes, peer evaluation, returning grades, and preparing and presenting a lecture about Security.
- **Fall 2023, 2024:** CSCI 530 - Security Systems, Prof. Clifford Neuman: Answering questions regarding lectures and assignments, grading assignments and exams, and holding office hours.

### European Banking Authority (EBA)

Paris, France

SENIOR SOFTWARE ENGINEER (FULL-TIME)

Feb 2023 – Jun 2023

- **Anti-money Laundering Platform:** Maintenance and development of the web application.
- **Egate:** Maintenance and development of the Competent Authorities Notification system.
- **Tech Skills:** Java, Angular, Docker, MongoDB, CSS.

### APINTECH

Limassol, Cyprus

SENIOR SOFTWARE ENGINEER (FREELANCE)

Feb 2023 – Jun 2023

- **UtilAI:** Architecture design, implementation, and development of a web platform for managing energy facilities of buildings.
- **Tech Skills:** JavaScript, Java, Angular, Quarkus, Docker, TypeScript, Figma, Minio, Elastic, SQL, CSS, HTML5, Python.

### UBITECH LTD

Athens, Greece

SENIOR SOFTWARE ENGINEER (FULL-TIME) - TEAM LEADER

Jun 2022 – Feb 2023

- **ResearchHUB:** Design, implementation, and development of a web platform that aggregates data for research projects in the United Arab Emirates.
- **eu-LISA:** Graphical design and development of the Greek Entry-Exit System for border control.
- **Vikelaia Audiovisual:** Development of the website that houses a collection of Cretan culture.
- **Tech Skills:** Quarkus, Angular, Docker, Elastic, MongoDB, Vue.js, Minio, Figma, Node.js, SQL, CSS.

### UBITECH LTD

Athens, Greece

SENIOR SOFTWARE ENGINEER (FULL-TIME)

Aug 2020 – Jun 2022

- **Dehems:** Graphical design, implementation, and development of a platform for monitoring patient records and experiments on HIV or COVID blood samples.
- **Kampos Chiou:** Development of the website that presents a historical region in Chios.
- **Co-Museum:** Re-development of the website that hosts international conferences for Benaki Museum.
- **Infinitech:** Development of a PoC for a Consent Management System for Banking Services.
- **Tech Skills:** Spring-boot, Quarkus, Angular, Docker, Elastic, Vue.js, Minio, Figma, SQL, MongoDB, CSS.

## UBITECH LTD

Athens, Greece

### SOFTWARE ENGINEER (FULL-TIME)

Nov 2018 – Aug 2020

- **ICARUS:** Design and development of the back-end system and the desktop application for an aviation industry-sensitive data processing and marketplace platform.
- **SPIDER 5G Cyber Range:** Design the graphical interface of the training platform.
- **DESTINY:** Design the graphical interface of the platform that handles digital medical processing.
- **Tech Skills:** Spring-boot, Angular, Docker, Elastic, MongoDB, Minio, Figma, Node.js, SQL, CSS, WordPress.

## Oracle

Athens, Greece

### BACK-END DEVELOPER (CONTRACTOR)

Summer 2018

- Maintenance and development of the back-end system for managing billing and user information in the Hellenic Telecommunications Organisation.
- **Tech Skills:** Java EE, OracleDB, Web Services.

## Cardlink

Athens, Greece

### FULL STACK WEB DEVELOPER (INTERN)

Spring 2018

- **Cardlink Pulse:** Design and development of the platform for managing data and information of merchant e-shop businesses.
- **Tech Skills:** MEAN stack (Angular, MongoDB, Node.js), Docker, Python.

## Quintessential SFT

Athens, Greece

### SOFTWARE ENGINEER (FREELANCE)

Aug 2017 – Jul 2019

- **Cardlink Chatbot:** Development of a customer support service chatbot.
- **Cloudnious:** Development of a Cloud-Based SaaS billing analytics platform.
- **GAMS Visualization:** Development of a platform for excel data visualization.
- **Tech Skills:** MEAN stack (Angular, MongoDB, Node.js), Docker, Chatbot (MS Bot Framework).

## BUTLAIR - Doobear

Athens, Greece

### JUNIOR BACK-END DEVELOPER (FREELANCE)

Feb 2017 – Mar 2018

- **BUTLAIR:** Design and development of the back-end system.
- **Doobear:** Development of a voice application based on Amazon Alexa.
- **Tech Skills:** JavaScript, Node.js, SQL, MongoDB, Express.js, Flask Ask, Alexa Skill Kit, Python.

## Peoplecert

Athens, Greece

### TRAINING ASSISTANT AT 2<sup>nd</sup> CODING BOOTCAMP (PART-TIME)

Apr 2017 – Jul 2017

- Assisting students with issues and questions related to web development technologies.
- **Tech Skills:** HTML5, CSS3, Java, JSP, Bootstrap, Servlets, Git, JavaScript, jQuery.

## Freelance

Athens, Greece

### WEB DEVELOPER

Oct 2015 – Dec 2016

- **Tech Skills:** WordPress, HTML5, CSS3.

## Research Experience

### Software Quality Lab (SQL), USC

Los Angeles, California

#### RESEARCH ASSISTANT (PART-TIME)

Aug 2023 – present

- **Research area:** Program Analysis, Software Engineering, Web Accessibility, Software Testing, Web Services.
- **Advisor:** Prof. William G.J. Halfond.

### BALab, AUEB

Athens, Greece

#### RESEARCH ASSISTANT (PART-TIME)

Feb 2021 – Jun 2023

- **Research area:** Boilerplate code, Code cloning, Clone detection, Boilerplate survey, Categorization.
- **Advisor:** Prof. Diomidis Spinellis.

### Centre of Planning and Economic Research

Athens, Greece

#### RESEARCH ASSISTANT (FULL-TIME)

Jun 2015 – May 2016

- Econometric analysis, on elements of the country's workers using STATA tool from 2008–2015, supervisor: Prof. P. Prodromidis.

### Management Science a Technology (DMST)

Athens, Greece

#### PARTICIPANT (PART-TIME)

Oct 2014 – May 2015

- Development of mathematical methods using Matlab to solve Numerical and Systems Equations. Supervised by Prof. P. Lappas.

# Publications

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## JOURNALS

- J1 N.D. Sakkas, S. Yfanti, P. Shah, N. Sakkas, **C. Chaniotakis**, C. Daskalakis, M. Domnich, E. Barbu. “*Explainable approaches for forecasting building electricity consumption.*” Published at Multidisciplinary Digital Publishing Institute - Energies (2023).

## CONFERENCE PUBLICATIONS

- C1 N. Sakkas, **C. Chaniotaki**, N. Sakkas, C. Daskalakis. “*Building data models and data sharing. Purpose, approaches, and a case study on explainable demand response.*” Published at Emerging Concepts for Sustainable Built Environments (SBEFIN 2022).
- C2 **C. Chaniotaki**, P. Prodromidis. “*The trade sector and regions that displayed an increase in employment during the recession (2008–2015).*” Presented at the 19<sup>th</sup> Scientific Conference of the Association of Greek Regionalists (2016).
- C3 P. Lappas, E. Kritikos, **C. Chaniotaki**, C.T. Lardopoulou, and A. Gotsi. “*An Educational Scenario in the context of Scientific Process: Numerical Solution of Equations and Systems of Equations using Cognitive Tools.*” Presented at the 12<sup>th</sup> Department of Management Science and Technology (DMST) Student Conference (2015).

# Teaching Experience

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## University of Southern California (USC)

Los Angeles, California

### INSTRUCTOR

Mar 2024

- **One-hour lecture** about “Security from Implementation Perspective” in the course CSCI 310: Software Engineering under the supervision of Prof. William G.J. Halfond in a class of 200 students.

## Redondo Union High School

Redondo Beach, California

### INSTRUCTOR

Oct 2023

- From Greece to Los Angeles: My Journey

## Freelance

Athens, Greece

### TUTOR

Sept 2018 – May 2023

- Learning programming and mathematics for high school and master students.

## Tech Connect - AUEB

Athens, Greece

### INSTRUCTOR

Feb 2022 & Feb 2023

- **One-hour technical training session** on “Building web applications with Java and React.”

## UBITECH LTD

Athens, Viti, and Kalavrita, Greece

### INSTRUCTOR

Nov 2021, Feb 2020, and Feb 2019

- **Three-hour seminar** session on “Angular Framework Architecture, Structure, and Best Practises with examples.”
- **One-hour seminar** for “Design Patterns.”
- **One-hour seminar** session on “Chatbots.”

## Department of Management Science and Technology (DMST), AUEB

Athens, Greece

### GUEST-LECTURE

Spring 2018 & 2019

- **Four four-hour lectures** on how to “Design a Mobile App From Scratch” under the supervision of Prof. George Lekakos in a class of 100 students.
- Content creator of the assignment.
- Answering questions and helping students with their assignments.

## Scientific Technology Conference from IEEE Student Branch

Lamia, Greece

### INSTRUCTOR

Dec 2018

- **One-hour seminar** session on “How to Create a Cloud Application with Firebase and Angular.”

## Management Science and Technology Conference (DMST), AUEB

Athens, Greece

### INSTRUCTOR

Feb 2017

- **One-hour workshop session** on “How to create an Alexa Skill.”

## Codding BootCamp - Athens Center for Entrepreneurship & Innovation (ACEin)

Athens, Greece

### INSTRUCTOR

Oct 2016

- **One-hour workshop** on “What are the neural networks.”

## Honors and Awards

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### Ph.D. in Computer Science, USC

FUNDING

Research or Teaching Assistantship.

Los Angeles, California

2023 – 2027

### Ph.D. in Computer Science, USC

SCHOLARSHIP

\$5,000 from Gerondelis Foundation.

Los Angeles, California

2024

### MSc in Information Systems, AUEB

SCHOLARSHIP

50% paid tuition for the top student admitted in the cohort.

Athens, Greece

2019

### Central Hackathon

1<sup>st</sup> PLACE WINNER

It was a competition for creating pilot applications for Smart Cities or Public Administrators. It involved 14 teams with 51 developers. In two days, my colleagues and I developed Logit, an app for tracking and managing urban infrastructure issues, such as water and energy development. It also provided public access to data, to inform citizens about city issues.

Lamia, Greece

2018

### Start-Up/Scale-Up Greece Awards by Philip Morris International

INNOVATIVE PRODUCT/SERVICE

Doobear, an audio social network, allowed users to record and share their voices with followers. We were awarded for the innovation of the idea.

Athens, Greece

2017

### Department of Management Science and Technology

AWARD FOR EXCELLENT ASSIGNMENT IN ALGORITHMS AND DATA STRUCTURES BY PROF. P. LOURIDAS

In a class comprising 100 students, I, along with four other students, received an award in recognition of our performance on a bonus assignment.

Athens, Greece

2016

## Certifications

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2021

Software Developer Skills with Java, PeopleCert

Athens, Greece

## Professional Service

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### Mining Software Repositories (MSR) 2023

JUNIOR PROGRAM COMMITTEE (PC)

I was in charge of reviewing two research papers in the field of Code Cloning.

Athens, Greece

2023

### Panorama of Entrepreneurship and Career

BACK END DEVELOPER

Along with fellow volunteers, we developed and maintained the backend service for Business Days submissions.

Athens, Greece

2016 – 2018

### 2<sup>nd</sup> Coding Bootcamp for Students, ACEin

CONTENT AND SUBJECT CREATOR

I held the responsibility of theme selection, crafting and presenting an introductory presentation for the bootcamp, outlining the categories, and coordinating the organization of workshops.

Athens, Greece

2016

## Skills

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**Programming Languages:** Java, JavaScript, Typescript, Python, HTML5, CSS3, JSP, jQuery, R, ~~TeX~~.

**Frameworks; Libraries:** Spring-Boot, Quarkus, Angular, Vue.js, MEAN Stack, RESTful API, Chatbots (BotBuilder), Electron.js, Minio, Hibernate, Maven, NPM, Soot.

**Databases:** SQL, MySQL, MSSQL, Postgres, OracleDB, MongoDB, Redis.

**Other:** Node.js, Docker, Git, Alexa Skill, Matlab, WordPress, Firebase, Elastic, Solr, Nginx, Selenium.

**Other Skills:** Code Review, Debugging, Testing, User Experience/User Interface (UX/UI), Figma.

**Languages:** Greek (Native), English (fluent oral and writing), Spanish (A1 - Basic words and phrases only).