# CHRYSOVALANTIS ANASTASIOU

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#### **EDUCATION**

## Los Angeles, California

### **University of Southern California**

**Expected December 2021** 

- Ph.D. in Computer Science, Current GPA: 3.89/4.0
- Research Interests: spatial-temporal data management & analytics, databases, distributed systems, IoT

## Los Angeles, California

## **University of Southern California**

Received May 2017

- M.Sc. in Computer Science, Data Science, GPA: 3.88/4.0 (Fulbright Scholar)
- Coursework: Analysis of Algorithms, Geospatial Information Management, Machine Learning, Artificial Intelligence

Nicosia, Cyprus University of Cyprus Received Jun 2015

- B.Sc. in Computer Science, GPA: 9.15/10 (Ranked 1st in class out of 83)
- Coursework: Advanced Topics in Databases, Data Structures, Systems Programming, Data Mining in the Web.

#### **PUBLICATIONS**

- "ADMSv2: A Modern Architecture for Transportation Data Management and Analysis," C. Anastasiou, J. Li, C. He, Y.-Y. Chiang, and C. Shahabi, 2nd ACM SIGSPATIAL International Workshop on Advances in Resilient and Intelligent Cities (ARIC), Chicago, 2019
- "Time-Dependent Reachability Analysis: A Data-Driven Approach," C. Anastasiou, C. Huang, S.H. Kim, and C. Shahabi, 20th IEEE International Conference on Mobile Data Management (MDM), 2019.
- "MRCubes: On-the-fly Computation of Location Popularity from Check-in Data Streams," G. Constantinou, C. Anastasiou, D. Stripelis, C. Shahabi, 20th IEEE International Conference on Mobile Data Management (MDM), 2019.
- "Extending Apache Spark with a Mediation Layer", Dimitris Stripelis, C. Anastasiou, and Jose Luis Ambite, Semantic Big Data Workshop, SIGMOD, June 10, Houston, TX USA, 2018.
- "Rayzit: An Anonymous and Dynamic Crowd Messaging Architecture", Constantinos Costa, Chrysovalantis Anastasiou, Georgios Chatzimilioudis and Demetrios Zeinalipour-Yazti, Proceedings of the 3rd IEEE International Workshop on Mobile Data Management Mining and Computing on Social Networks collocated with IEEE MDM '15 (Mobisocial '15), Volume 2, Pages: 98-103, Pittsburgh PA USA, 2015.

#### **SKILLS & TECHNOLOGIES**

- Programming Languages: Java, Scala, C/C++, Python, Kotlin, HTML5, CSS, JavaScript, PHP
- Frameworks / SDKs: Apache Spark, Map Reduce, iOS, Android
- Database Management Systems: Microsoft SQL Server, MySQL, Couchbase, MongoDB, PostgreSQL

#### **WORK EXPERIENCE**

#### Research Intern

#### Google Inc., Mountain View

May 2020 - Aug 2020

- Understanding the language of hashtags through Natural Language Processing
- Predicting and/or synthesizing hashtags for web documents

## **Software Engineering Intern**

#### Google Inc., Mountain View

May 2019 - Aug 2019

- Design and implementation of a major Data Management component for a new Google Cloud vertical product.
- Improvement of the product's testing infrastructure.

## **Software Engineering Intern**

## Google Inc., Mountain View

May 2018 - Aug 2018

- Research in Earthquake detection using smartphone sensor data.
- Designed and developed a modular toolset for ingesting public seismic data.

# Research Assistant

#### IMSC, Viterbi School of Engineering, USC

Aug 2017 -

- ADMS: Archived Transportation Data Management System.
- Intelligent IoT Integrator: A marketplace for IoT data streams.
- Agora: A Spatial-Temporal Index for real-time Approximate Location Popularity in Multiple Resolutions.

#### **Software Engineering Intern**

#### Bloomberg LP, New York

Jun 2017 - Aug 2017

- Software Infrastructure / Systems Cache Infrastructure
  - Improved performance of company's internal local cache framework and added new features.
  - Developed a benchmarking framework for all types of cache systems.
  - Designed and implemented a module for suggesting optimal cache configuration parameters.

## **Software Engineering Intern**

## Bloomberg LP, New York

Jun 2016 - Aug 2016

- Software Infrastructure / Systems Cache Infrastructure
  - Integration of in-house database's new features with the internal Tiered Cache Framework.

• Automated the deployment of Tiered Cache framework.

# Software Engineer iOS Lead Developer

## Funifi LTD (startup), Cyprus

Aug 13 – Jul 2015

- Collaborated cheerfully with the iOS team in developing Funifi DO, the company's core app.
- Backend Servers management, website maintenance, office network administration.

#### **Research Assistant**

## **Data Management Systems Laboratory, UCY**

Sep 2013 - Jul 2015

- Thesis: "TelcoWare: An Extensible Big Data Processing Architecture for the Telecom Industry"
  - Designed the overall architecture of the system.
  - Implemented data connectors on Apache Spark for ingestion.
  - Developed a module to store data and analytics in Couchbase.
- Implemented an iOS spatial data management engine for the major GIS company in Cyprus (AppStore).
- Rayzit: A crowd messaging application that delivers your questions, inquiries and ideas to the closest users
  around
  - Implemented a complete iOS stack for the award-winning application.

#### **Research Assistant**

## Laboratory of Internet Computing, UCY

Apr 2013 - Aug 2013

- CELAR: Automatic, multi grained elasticity provisioning for the Cloud
  - Developed an aggregation and statists Web API module for the servers monitoring.
  - Implemented a simple web UI for the servers' stats.

## **CONFERENCES & PANELS**

Appointed Officer & Organizing committee member, ACM SIGSPATIAL

Sep 2017 -

 Evaluator, 7th National Logipaignion Contest for Elementary and High School Students, <a href="http://logipaignion.cs.ucy.ac.cy/2015">http://logipaignion.cs.ucy.ac.cy/2015</a>

Apr 2015 Oct 2013

Panel Member, ICT Conference, Nicosia, Cyprus

## OTHER ACADEMIC EXPERIENCE

- UCYApp: Bringing together all the services of University of Cyprus in a single mobile app.
  - Led team of 5. Designed the architecture. Developed the web and iOS stacks.
- NearFieldCare: A single tap can save your life (Imagine Cup 2013)
  - Worked on the complete Windows Phone stack of the project.

## **AWARDS & ACHIEVEMENTS**

- IEEEXtreme 8.0 programming competition, ranked 108th/1700 teams worldwide
- Fulbright Student Scholarship recipient for graduate studies in USA (Fall 2015)
- ACM SIGMOD 2014 Programming Contest, ranked 4th nationwide and 13th/33 teams worldwide
- Microsoft Imagine Cup 2013 World Wide finalist and National Winner
- Won a place at the Ice Climate Education campus in 2008, an international youth campus that took place in Iceland.