# 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, spatial 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)
- <u>Coursework</u>: 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

#### **SKILLS & TECHNOLOGIES**

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

#### **WORK EXPERIENCE**

#### Research Intern

## Google Inc., Mountain View

May 2020 -

- Understanding the language of hashtags through Natural Language Processing and more
- Designing and training NLP models for user-generated hashtag datasets

#### **Software Engineering Intern**

#### Google Cloud, Sunnyvale

May 2019 - Aug 2019

- · Automatic matching of arbitrary schemata to universal schemata
- Schema-agnostic SQL processing and ML models

## 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 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 (Chipmunk)
  - Automated deployment of Chipmunk

# Software Engineer iOS Lead Developer

# Funifi LTD (startup), Cyprus

Aug 13 - Jul 2015

- Collaborated cheerfully with the iOS team in developing Funifi DO
- 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"
  - Contributed to the overall architecture design
  - Implemented data connectors on Apache Spark
  - Developed a module to store data and analytics results in Couchbase (NoSQL database)
- Implemented an iOS spatial data management engine for the major GIS company in Cyprus (currently in 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 (currently in AppStore)

#### **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

#### **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, Chrysovalantis 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.

#### **CONFERENCES & PANELS**

Appointed Officer & Organizing committee member, ACM SIGSPATIAL

Sep 2017 - Dec 2020

 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

Panel Member, ICT Conference, Nicosia, Cyprus

Oct 2013

# 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 4<sup>th</sup> nationwide and 13<sup>th</sup>/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.