

# Costantinos Costa

## (Curriculum Vitae)

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## I. RESEARCH INTERESTS

*Data Management and Mobile Computing, particularly distributed query processing for spatial and spatio-temporal datasets.*

## II. EDUCATION

- M.Sc.** Computer Science, University of Cyprus 2011-2013  
*Thesis: Scalable Continuous All k Nearest Neighbors Queries*
- B.Sc.** Computer Science, University of Cyprus 2007-2011  
*Thesis: SmartTrace: A Distributed Spatio-Temporal Similarity Search Framework using Android-based Smartphone*

## III. ACADEMIC APPOINTMENTS

- Ph.D. Candidate**, Dept. of Computer Science, University of Cyprus, Cyprus 09/2013-current
- Research Assistant**, DMSL Lab, University of Cyprus, Cyprus 2010-current
- Teaching Assistant**, University of Cyprus, Cyprus 2011-2015
- Academic Collaborator**, University of Cyprus, Nicosia, Cyprus 2009-2013

## IV. PUBLICATIONS

Google Scholar Citations: 70; h-index<sup>1</sup>: 4; i10-index<sup>2</sup>: 3

### JOURNAL AND MAGAZINE PAPERS

- J3.** “Crowdsourcing Emergency Data in Non-Operational Cellular Networks”, Georgios Chatzimilioudis, **Constantinos Costa**, Demetrios Zeinalipour-Yazti, Wang-Chien Lee, **Information Systems (InfoSys)**, Special Issue on Large-Scale Data Management for Mobile Applications, Vol. 64, pp. 292 - 302, Oxford, UK, **2017**.

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<sup>1</sup>h-index is the largest number h such that h publications have at least h citations.

<sup>2</sup>i10-index is the number of publications with at least 10 citations.

- J2. “Distributed In-Memory Processing of All k Nearest Neighbor Queries”**, Georgios Chatzimilioudis, **Constantinos Costa**, Demetrios Zeinalipour-Yazti and Wang-Chien Lee and Evaggelia Pitoura, **Transactions on Knowledge and Data Engineering (TKDE)**, IEEE Computer Society, Volume 28, Issue 4, Pages: 925-938, Los Alamitos, CA, USA, **2016**.
- J1. “Crowdsourced Trajectory Similarity with Smartphones”**, Demetrios Zeinalipour-Yazti, Christos Laoudias, **Constantinos Costa**, Michalis Vlachos, Dimitrios Gunopulos, **IEEE Transactions on Knowledge and Data Engineering (TKDE)**, IEEE Computer Society, Volume 25, Pages: 1240-1253, Los Alamitos, CA, USA, **2013**.

## CONFERENCE AND WORKSHOP PAPERS

- C8. “Efficient Exploration of Telco Big Data with Compression and Decaying”**, **Constantinos Costa**, Georgios Chatzimilioudis, Demetrios Zeinalipour-Yazti, Mohamed F. Mokbel, *Proceedings of the 33rd International Conference on Data Engineering (ICDE 2017)*, 12 pages, IEEE Press, San Diego, CA, USA, April 19-22 **2017**.
- C7. “SPATE: Decaying and Exploration of Telco Big Data”**, **Constantinos Costa**, Georgios Chatzimilioudis, Demetrios Zeinalipour-Yazti, Mohamed F. Mokbel, Demo at *Proceedings of the 33rd International Conference on Data Engineering (ICDE 2017)*, 2 pages, IEEE Press, San Diego, CA, USA, April 19-22 **2017**.
- C6. “Distributed In-Memory Processing of All k Nearest Neighbor Queries (Extended Abstract)”**, Georgios Chatzimilioudis, **Constantinos Costa**, Demetrios Zeinalipour-Yazti and Wang-Chien Lee and Evaggelia Pitoura, *Proceedings of the 32nd International Conference on Data Engineering (ICDE 2016)*, Helsinki, Finland, May 16-20, Pages: x, **2016**.
- C5. “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 2015)*, Pittsburgh, PA, USA, July 15-18, 978-1-4799-9972-9/15, IEEE Press, Volume 2, pp. 98-103, **2015**.
- C4. “Managing Smartphone Testbeds with SmartLab”**, George Larkou, **Constantinos Costa**, Panayiotis K. Andreou, Andreas Konstantinides and Demetrios Zeinalipour-Yazti *Proceedings of the 27th USENIX Large Installation System Administration Conference (LISA 2013)*, Pages: 115-132, ISBN: 978-1-931971-05-8, Washington D.C., USA, **2013**.
- C3. “Demo: A Programming Cloud of Smartphones”**, Andreas Konstantinidis, **Constantinos Costa**, George Larkou and Demetrios Zeinalipour-Yazti, *The 10th International Conference on Mobile Systems, Applications and Services (MobiSys 2012)*, Low Wood Bay, Lake District UK, June 25 - 29, Pages: 465-466, ISBN: 978-1-4503-1301-8, **2012**.
- C2. An Indoor Trajectory Comparison Framework for Android Smartphones**, Christos Laoudias, **Constantinos Costa**, Demetrios Zeinalipour-Yazti, Christos G. Panayiotou, Demo at the International Conference on Indoor Positioning and Indoor Navigation (**IPIN 2011**), Guimares, Portugal, 21-23 Sept. **2011**.
- C1. “SmartTrace: Finding Similar Trajectories in Smartphone Networks without Disclosing the Traces”**, **Constantinos Costa**, Christos Laoudias, Demetrios Zeinalipour-Yazti, Dimitrios Gunopulos Demo at 27th International Conference on Data Engineering March (**ICDE 2011**), ISBN 978-1-4244-8958-9, pp. 1288-1291, IEEE Press, April 11-16, Hannover, Germany, **2011**, [Acceptance Rate: **31% (21/67)**].

## THESES

- T2.** “Scalable Continuous All k Nearest Neighbors Queries”,  
Costantinos Costa, M.Sc. Thesis, *Dept. of Computer Science, University of Cyprus*, August 2013.
- T1.** “SmartTrace: A Distributed Spatio-Temporal Similarity Search Framework using Android-based Smartphones”,  
Costantinos Costa, B.Sc. Thesis, *Dept. of Computer Science, University of Cyprus*, June 2011.

## GREEK CONFERENCES

- G4.** “Distributed In-Memory Processing of All k Nearest Neighbor Queries”,  
Georgios Chatzimilioudis, **Constantinos Costa**, Demetrios Zeinalipour-Yazti and Wang-Chien Lee and Evaggelia Pitoura, *The 14th Hellenic Data Management Symposium (HDMS 2016)*, Athens, Greece, July 28-29, 2016. (unofficial proceedings)
- G3.** “SmartTrace: Finding Similar Trajectories in Smartphone Networks without Disclosing the Traces”,  
**Constandinos Costa**, Christos Laoudias, Demetrios Zeinalipour-Yazti, Dimitrios Gunopulos Demo at *The 10th Hellenic Data Management Symposium (HDMS 2011)*, Athens, Greece, June 17-18, 2011 (unofficial proceedings).
- G2.** “PEONY:Software for image analysis in Nuclear Medicine ”, Isabelle Chrysanthou-Bauster, Charalampos Yiannakkaras, Ourania Demetriadou, Yiannis Parpottas, Stelios Christofides, **Costa Costantinos**, Marta Wasilewska-Radwanska, International Conference Image Optimisation in Nuclear Medicine, Atlantica Aeneas Resort, Ayia Napa, Cyprus, March 23rd - 26th, 2011.
- G1.** “A Distributed Spatio-Temporal Similarity Search Framework using Android-based Smartphones (demo)”,  
**Constandinos Costa**, Constandinos Christoforou, George Nicolaides, Diomidis Papadiomidous, Christos Laoudias, Demetrios Zeinalipour-Yazti *The 9th Hellenic Data Management Symposium (HDMS 2010)*, Ayia Napa, Cyprus, June 30 - July 3, 2010 (unofficial proceedings).

## PRESENTATIONS

- **Presentation**, “Anyplace Indoor Information Service”, Symposium on Challenges of Fingerprinting in Indoor Positioning and Navigation, Open University of Catalonia, Barcelona, Spain, May 3, 2016.
- **Presentation**, “Managing Smartphone Testbeds with SmartLab”, 27th USENIX Large Installation System Administration Conference ’ (LISA ’13), Washington D.C., USA, November 7, 2013.
- **Presentation**, “Trajectory Similarity with SmartTrace”, Final Conference of MOVE COST Action IC903, Vienna, Austria, Sept 30 - Oct 1, 2013, October 1, 2013.
- **Presentation**, “Data Management in Smartphone Networks (for High School Students)”, 2nd Computer Science Day for High School Students, University of Cyprus, Nicosia, Cyprus, March 19, 2011.

## V. RESEARCH AND DEVELOPMENT PROJECTS

- **2016 (PI): New Researcher Program**, University of Cyprus, Ph.D. Fellowship for C. Costa, Advisor: Demetrios Zeinalipour-Yazti.
- **06/2015-06/2016 (Research Assistant)**: "Big Data Processing in Telecommunication Datacenters", MTN Cyprus Ltd., Cyprus.
- **2014 (Young Researcher)**: "New Researcher Program", University of Cyprus, PhD Fellowship for C. Costa, Advisor: Demetrios Zeinalipour-Yazti.
- **01/2014-12/2014 (Research Assistant)**: "Spatio-Temporal Mobile Data Management", Geomatic Technologies Ltd., Cyprus.
- **11/2012-12/2013 (Research Assistant)**: "AppCampus Award: Rayzit", Industrial Grant by Aalto University, Microsoft, Nokia.

## VI. DEPARTMENTAL SERVICE

- **Evaluator/ Organizer**, 6th National Logipaignion Contest for Elementary and High School Students,

## VII. PROFESSIONAL ACTIVITY & MEMBERSHIPS

- **Organizing Committee Member:**
  - **Webmaster** 3rd International Workshop On Human Mobility Computing and Privacy (HuMoComP 2015), held in conjunction with the 16th IEEE MDM 2015, June 18, 2015 - Pittsburgh, PA, USA, **2015**.
- **External Referee for Conferences/Symposiums:**
  - ACM SIGMOD - Intl. Management of Data Conference, 2015.
  - VLDB - Very Large Data Bases Conference, 2014
  - ECML PKDD - European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, 2014.
  - EDBT/ICDT - Joint Conference, 2014.
  - ACM DEBS - Intl. Conference on Distributed Event-Based Systems, 2014.
  - IEEE TSC - Transactions on Services Computing, 2014.
  - ACM SIGMOD - Intl. Management of Data Conference, 2014.
  - IEEE ISSNIP - Ninth Intl. Conference on Intelligent Sensors, Sensor Networks and Information Processing, 2014.
  - IEEE ICDE - Intl. Conference on Data Engineering, 2013.
  - SSDBM - Intl. Conference on Scientific and Statistical Database Management, 2013.
  - VLDB - Very Large Data Bases Conference, 2013.
- **External Referee for Workshops:**
  - IEEE MobiSocial (MDM) - Intl. Workshop on Mobile Data Management, Mining, and Computing on Social Networks, 2015.

## VIII. TEACHING WORK EXPERIENCE

### TEACHING APPOINTMENTS

Teaching Assistant, Dept. of Computer Sc., University of Cyprus

2011-2015

- **EPL660 - Information Retrieval and Search Engines**, taught by Prof. George Pallis  
<http://www.cs.ucy.ac.cy/courses/EPL660/>
- **EPL451 - Data Mining on the Web**, taught by Prof. George Pallis  
<http://www.cs.ucy.ac.cy/courses/EPL451/>
- **EPL646: Advanced Topics in Databases**, taught by Prof. Demetris Zeinalipour  
<https://www.cs.ucy.ac.cy/~dzeina/courses/epl646/>
- **EPL233 - Object-Oriented Programming**, taught by Prof. Georgia Kapitsaki/  
Panayiotis G. Andreou  
<https://www.cs.ucy.ac.cy/~dzeina/courses/epl233/>
- **EPL231 - Data Structures and Algorithms**, taught by Prof. George Pallis  
<https://www.cs.ucy.ac.cy/~dzeina/courses/epl231/>
- **EPL031 - Introduction to Programming**, taught by Prof. Fudos Ioannis  
<http://moodle.cs.ucy.ac.cy/course/info.php?id=101>

## IX. ADVISING

- Marios Vladimirou, Panayiotis Eracleous, Philippos Papaphilippou, Philkypros Ioulianou, Winning in National Imaginecup contest (Rainbow Beams), Department of CS, University of Cyprus, Cyprus.

## X. AWARDS & HONORS

- Travel Grant Award among 200 invitees globally to attend the 4th Heidelberg Laureate Forum (HLF), Heidelberg, Germany, Sept 18 - 23, 2016.
- Startup prize award at HackCyprus sponsored by the CIIM Entrepreneurship and Innovation Centre, 2013.
- Best Mobile Application Award at HackCyprus sponsored by Cocoon Creations, 2013.
- Ranked 1st place at the Microsoft ImagineCup national competition with *iDOC* implementation, 2011.
- Appcampus Award, “Rayzit: Crowd Messaging” by Microsoft, Nokia and Aalto University (Finland), 2013.

## XI. LANGUAGES

- Greek (native)
- English (fluent)

## XII. PERSONAL INFORMATION

- Gender: Male.
- Date of Birth: Feb 22, 1988.
- Place of Birth: Limassol/Cyprus.
- Nationality: Cypriot.

## XIII. REFERENCES

- **Zeinalipour Demetris**

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