

A stylized world map is rendered in a light blue, dotted texture against a dark blue background. Several circular callouts of varying sizes are scattered across the map, some containing a grid pattern and others showing a globe. A large white circle is centered over the Mediterranean region, containing the event title.

17th
HELLENIC
DATABASE
MANAGEMENT
SYMPOSIUM

DATE

July 8 - 9 2019 | Athens, Greece

VENUE

Royal Olympic Hotel, Panorama Hall

DAY 1



8:45-9:20	REGISTRATION
9:20-9:30	OPENING REMARKS Georgia Koutrika (ATHENA Research and Innovation Center) Theodore Dalamagas (ATHENA Research and Innovation Center)
9:30-10:00	KEYNOTE 1 Alkis Polyzotis (Google)
10:00-11:00	SESSION 1 RDF, Recommendations and Data Preparation
11:00-11:30	BREAK
11:30-13:00	SESSION 2 Systems and Indexing
13:00-14:30	LUNCH BREAK
14:30-15:15	KEYNOTE 2 (AWARDS) Anastasia Ailamaki (EPFL)
15:15-15:30	INDUSTRY TALK 1 Oracle
15:30-16:30	SESSION 3 Entrepreneurship Panel
16:30-17:00	BREAK
17:00-19:00	SESSION 4 Startups and demos › Flash Talks Startups (18 min) › Flash Talks Demos (21 min) › Poster Session with Startups and Demos
19:00	START MOVING TO DINNER
20:00	DINNER

DAY 2



8:50	ACM W CHAPTER
9:00-9:30	KEYNOTE 3 Kostas Tzoumas (Data Artisans)
9:30-10:30	SESSION 5 Transformations and Anomaly detection
10:30-11:00	BREAK
11:00-12:45	SESSION 6 Big Data, Graphs, and GPUs
12:45-14:00	LUNCH BREAK
14:00-15:45	SESSION 7 Research Flash Talks and Position Statements
15:45-16:15	BREAK
16:15-16:30	INDUSTRY TALK 2 IBM
16:30-17:30	AI/DB PANEL
17:30	CLOSING REMARKS

SESSIONS

1

2

1

RDF, Recommendations and Data Preparation

15min talks

TITLE

Exploring RDFS KBs Using Summaries

AUTHORS

Georgia Troullinou
FORTH-ICS
Haridimos Kondylakis
FORTH-ICS
Kostas Stefanidis
Tampere University
Dimitris Plexousakis
FORTH-ICS

VENUE

International Semantic Web Conference (ISWC) 2018

With a little help from my friends (and their friends): Influence neighborhoods for social recommendations

Avni Gulati
San Jose State University
Magdalini Eirinaki
San Jose State University

WWW 2019

Gravitating to Rigidity: Patterns of Schema Evolution -and its Absence- in the Lives of Tables

Panos Vassiliadis
University of Ioannina
Apostolos V. Zarras
University of Ioannina
Ioannis Skoulis
Bouvet ASA, Oslo

Information Systems 2017

Feedback Driven Improvement of Data Preparation Pipelines

Nikolaos Konstantinou
University of Manchester
Norman Paton
University of Manchester

21st International Workshop on Design, Optimization, Languages and Analytical Processing of Big Data co-located with EDBT/ICDT Joint Conference (EDBT/ICDE 2019)

2

Systems and Indexing

15min talks

TITLE

Query Fresh: Log Shipping on Steroids

AUTHORS

Tianzheng Wang
University of Toronto
Ryan Johnson
LogicBlox
Ippokratis Pandis
Amazon

VENUE

VLDB 2018

SESSIONS 2

Hardware-conscious Hash-Joins
on GPUs


Panagiotis Sioulas
EPFL
Periklis Chrysogelos
EPFL
Manos Karpathiotakis
Facebook
Raja Appuswamy
Eurecom
Anastasia Ailamaki
EPFL


35th IEEE International
Conference on Data Engineering
(ICDE 2019)


An Efficient Index for RDF Query
Containment



Theofilos Mailis
National and Kapodistrian
University of Athens
Yannis Kotidis
Athens University of Economics
and Business
Vaggelis N Nikolopoulos
National and Kapodistrian
University of Athens
Evgeny Kharlamov
University of Oslo
Ian Horrocks
University of Oxford
Yannis Ioannidis
National and Kapodistrian
University of Athens



ACM SIGMOD 2019


HetExchange: Encapsulating
heterogeneous CPU-GPU
parallelism in JIT compiled
engines


Periklis Chrysogelos
EPFL
Manos Karpathiotakis
Facebook
Raja Appuswamy
Eurecom
Anastasia Ailamaki
EPFL


Proceedings of the VLDB
Endowment 2019


Coconut: A Scalable Bottom-
Up Approach for Building Data
Series Indexes


Haridimos Kondylakis
FORTH-ICS
Niv Dayan
Harvard University
Kostas Zoumpatianos
Harvard University
Themis Palpanas
Paris Descartes University


VLDB 2018

SESSIONS

2

3

4

The Data Calculator*: Data Structure Design and Cost Synthesis from First Principles and Learned Cost Models

Stratos Idreos
Harvard University
Kostas Zoumpatianos
Harvard University
Brian N Hentschel
Harvard University
Michael Kester
Harvard University
Demi Guo
Harvard College

ACM SIGMOD 2018

INDUSTRY TALK 1

ORACLE

Giannis Orsaris

Master Principal Solution Engineer Data Management, Oracle Hellas

TITLE: Oracle Autonomous Data Platform

3

Entrepreneurship Panel

MODERATOR

Kostas Tzoumas
Data Artisans

PARTICIPANTS

Anastasia Ailamaki
CEO Raw labs
Panos Papadopoulos
Marathon Venture Capital
Chris Kachris
CEO, Inaccel
Costa Tsaousis
CEO, Netdata

4

Flash Talks Startups

FLASH TALKS DEMOS

The return of JedAI: End-to-End Entity Resolution for Structured and Semi-Structured Data

- › My-Netdata (<https://my-netdata.io>)
- › Arrikto (<https://www.arrikto.com>)
- › Lenses (<https://lenses.io>)
- › RAW Labs (<https://www.raw-labs.com>)
- › Inaccel (<https://www.inaccel.com>)
- › Marathon (<https://marathon.vc>)

George Papadakis
National and Kapodistrian University of Athens
Leonidas Tsekouras
NCSR "Demokritos"
Emmanouil Thanos
University of Leuven
George Giannakopoulos
IIT Demokritos
Themis Palpanas
Paris Descartes University
Manolis Koubarakis
National and Kapodistrian University of Athens

PVLDB 2018

SESSIONS

IVLG: Interactive Visualization of Large Graphs

Maria K Krommyda
National Technical University of Athens

Verena Kantere
University of Ottawa

Yannis Vassiliou
National Technical University of Athens

IEEE 35th International Conference on Data Engineering (ICDE 2019)

Apollo: A Dataset Profiling and Operator Modeling System

Tasos Bakogiannis
National Technical University of Athens

Ioannis Giannakopoulos
National Technical University of Athens

Dimitrios Tsoumakos
Ionian University

Nectarios Koziris
National Technical University of Athens

ACM SIGMOD 2019

Time-aware Sub-Trajectory Clustering in Hermes@ PostgreSQL

Panagiotis Tampakis
University of Piraeus

Nikos Pelekis
University of Piraeus

Natalia Andrienko
Fraunhofer, DE

Gennady Andrienko
Fraunhofer, DE

Georg Fuchs
Fraunhofer, DE

Yannis Theodoridis
University of Piraeus

IEEE 34th International Conference on Data Engineering (ICDE 2018)

Demo: Maritime Event Recognition

Manolis N Pitsikalis
NCSR "Demokritos"

Alexander Artikis
University of Piraeus

DEBS 2019

Coconut Palm: Static and Streaming Data Series Exploration Now in your Palm

Haridimos Kondylakis
FORTH-ICS

Niv Dayan
Harvard University

Kostas Zoumpatianos
Harvard University

Themis Palpanas
Paris Descartes University

ACM SIGMOD 2019 (to appear)

SESSIONS

4

5

Database Search Systems
through THOR's Eyes

Orest Gkini
National and Kapodistrian
University of Athens
Georgia Koutrika
Athena Research Center
Theofilos Belmpas
National and Kapodistrian
University of Athens

5

Transformations and Anomaly detection

15min talks

TITLE

Attacking Diophantus: Solving a
Special Case of Bag Containment

AUTHORS

George Konstantinidis
University of Southampton
Fabio Mogavero
Università degli Studi di Napoli
Federico II

VENUE

ACM PODS 2019

SynthEdit: Format
transformations by example
using edit operations

Alex Bogatu
University of Manchester
Alvaro A.A. Fernandes
University of Manchester
Norman W. Paton
University of Manchester
Nikolaos Konstantinou
University of Manchester

22nd International Conference
on Extending Database
Technology (EDBT 2019)

SciLens: Evaluating the Quality
of Scientific News Articles Using
Social Media and Scientific
Literature Indicators

Panayiotis Smeros
EPFL
Carlos Castillo
UPF
Karl Aberer
EPFL

WWW 2019

Deep Anomaly Detection

Emmanuel Müller
University of Bonn & Fraunhofer
IAIS

35th International Conference
on Machine Learning (ICML 2018)

SESSIONS

Big Data, Graphs, and GPUs 15min talks

TITLE

Large Scale Sentiment Learning
with Limited Labels

GPU Rasterization for Real-
Time Spatial Aggregation over
Arbitrary Polygons

Scalable Parallelization of RDF
Joins on Multicore Architectures

Risk-averse graph mining

Automated Audience
Segmentation Using Reputation
Signals

AUTHORS

Vasileios Iosifidis
L3S Research Center / Leibniz
University of Hannover
Eirini Ntoutsis
L3S Research Center

Eleni Tzirita Zacharatou
EPFL
Harish Doraiswamy
New York University
Anastasia Ailamaki
EPFL
Claudio T. Silva
EPFL
Juliana Freire
New York University

Dimitris Bilidas
National and Kapodistrian
University of Athens
Manolis Koubarakis
National and Kapodistrian
University of Athens

Charalampos Tsourakakis
Boston University
Shreyas Sekar
University of Washington
Johnson Lam
Boston University
Liu Yang
Yale University

Maria Daltayanni
University of San Francisco
Ali Dasdan
KD Consulting
Luca de Alfaro
University of California, Santa
Cruz

VENUE

ACM SIGKDD 2017

VLDB 2018

22nd International Conference
on Extending Database
Technology (EDBT 2019)

ECML PKDD 2018

ACM SIGKDD 2018

SESSIONS

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7

Event and Sub-Event Detection in Social Networks

Antonia Saravanou
National and Kapodistrian
University of Athens
Ioannis Katakis
University of Nicosia
George Valkanas
Detectica
Dimitrios Gunopoulos
National and Kapodistrian
University of Athens

34th IEEE International
Conference on Data
Engineering (ICDE 2018)

Functional Geometric Monitoring
for Distributed Streams

Vasilis Samoladas
Technical University of Crete
Minos Garofalakis
Technical University of Crete

22nd International Conference
on Extending Database
Technology (EDBT 2019)

7

Research Flash Talks and Position Statements

5min talks

TITLE

RawVis: Visual exploration over
raw data

AUTHORS

Nikos Bikakis
University of Ioannina
Stavros Maroulis
Athena Research Center
George Papastefanatos
Athena Research Center
Panos Vassiliadis
University of Ioannina

VENUE

22nd European Conference on
Advances in Databases and
Information Systems (ADBIS
2018) -Best Paper Award-

Schema-agnostic Progressive
Entity Resolution

Giovanni Simonini
University of Modena and Reggio
Emilia
George Papadakis
National and Kapodistrian
University of Athens
Themis Palpanas
Paris Descartes University
Sonia Bergamaschi
University of Modena and Reggio
Emilia

IEEE Transactions on
Knowledge and Data
Engineering (TKDE) 2019

SESSIONS

Maintaining Wavelet Synopses
for Sliding-Window Aggregates

Ioannis Mytilinis
National Technical University of
Athens
Dimitrios Tsoumakos
Ionian University
Nectarios Koziris
National Technical University of
Athens

ACM SSDBM 2019

Corridor Learning Using
Individual Trajectories

Nikolaos Zygouras
National and Kapodistrian
University of Athens
Dimitrios Gunopulos
National and Kapodistrian
University of Athens

19th IEEE International
Conference on Mobile Data
Management (MDM 2018)

A Content-Based Approach for
Modeling Analytics Operators

Ioannis Giannakopoulos
National Technical University of
Athens
Dimitrios Tsoumakos
Ionian University
Nectarios Koziris
National and Kapodistrian
University of Athens

ACM International Conference
on Information and Knowledge
Management (CIKM) 2018

Semantic-aware Aircraft
Trajectory Prediction using Flight
Plans

Harris Georgiou
University of Piraeus
Nikos Pelekis
University of Piraeus
Stylianos Sideridis
University of Piraeus
David Scarlatti
Boeing Research & Technology
Europe
Yannis Theodoridis
University of Piraeus

International Journal of Data
Science and Analytics (IJDSA),
(online / in press)

Hot Spot Analysis over Big
Trajectory Data

Panagiotis Nikitopoulos
University of Piraeus
Aris-Iakovos Paraskevopoulos
University of Piraeus
Christos Doukeridis
University of Piraeus
Nikos Pelekis
University of Piraeus
Yannis Theodoridis
University of Piraeus

IEEE BigData 2018

SESSIONS

ORiON: Online ResOurce
Negotiator for multiple Big Data
Analytics frameworks


Nikos Zacheilas
Athens University of Economics
and Business
Nikolaos Chalvantzis
National Technical University of
Athens
Ioannis Konstantinou
National Technical University of
Athens
Vana Kalogeraki
Athens University of Economics
and Business
Nectarios Koziris
National Technical University of
Athens


IEEE ICAC 2018



Notable Characteristics Search
through Knowledge Graphs


Davide Mottin
Hasso Plattner Institute
Bastian Grasic
Hasso Plattner Institute
Axel Krosch
Hasso Plattner Institute
Patrick Siegler
Hasso Plattner Institute
Emmanuel Müller
University of Bonn & Fraunhofer
IAIS



21st International Conference
on Extending Database
Technology (EDBT 2018)


Two-hop privacy-preserving
nearest friend searches


Alexandros Karakasidis
University of Macedonia
George Pallis
University of Cyprus
Marios Dikaiakos
University of Cyprus


Knowledge and Information
Systems


Identifying Bias in Name
Matching Tasks


Alexandros Karakasidis
University of Macedonia
Evaggelia Pitoura
University of Ioannina


22nd International Conference
on Extending Database
Technology (EDBT 2019)

SESSIONS

Named Entity Recognition,
Linking and Generation for Greek
Legislation

Iosif Angelidis
National and Kapodistrian
University of Athens
Ilias Chalkidis
Athens University of Economics
and Business, Greece
Manolis Koubarakis
National and Kapodistrian
University of Athens

31st International Conference
on Legal Knowledge and
Information Systems (JURIX
2018)

Incremental Event Calculus for
Run-Time Reasoning

Efthimis Tsilionis
NCSR "Demokritos"
Alexander Artikis
University of Piraeus
Paliouras Georgios
NCSR "Demokritos"

13th ACM International
Conference on Distributed and
Event-Based Systems (DEBS
2019)

DERP: A Deep Reinforcement
Learning Cloud System for Elastic
Resource Provisioning

Constantinos Bitsakos
National Technical University of
Athens
Ioannis Konstantinou
National Technical University of
Athens
Nectarios Koziris
National Technical University of
Athens

CloudCom 2018

Realizing Memory-Optimized
Distributed Graph Processing

Panagiotis Liakos
National and Kapodistrian
University of Athens
Katia Papakonstantinou
Athens University of Economics
and Business
Alex Delis
National and Kapodistrian
University of Athens

IEEE Transactions on
Knowledge and Data
Engineering 2018

Merging RDF Characteristic Sets
to Optimize SPARQL Queries

Marios Meimaris
Athena Research Center
George Papastefanatos
ATHENA Research Center

SESSIONS

A Graph-Theoretic Approach for Recommendation Models

Marialena Kyriakidi
National and Kapodistrian University of Athens
Georgia Koutrika
Athena Research Center
Yannis Ioannidis
National and Kapodistrian University of Athens

Studying the readability of scientific papers

Thanasis Vergoulis
IMSI/Athena RC
Ilias Kanellos
Athena Research Center
Anargiros Tzerefos
University of the Peloponnese
Serafeim Chatzopoulos
Athena Research Center
Theodore Dalamagas
Athena Research Center
Spiros Skiadopoulos
University of the Peloponnese

Artificial Intelligence for Copernicus Data: the ExtremeEarth Project

George Stamoulis
National and Kapodistrian University of Athens

sql2tf: From SQL to TensorFlow Physical Plans of Machine Learning Algorithms

Nantia Makrynioti
Athens University of Economics and Business
Ruy Ley-Wild
relationalAI
Vasilis Vassalos
Athens University of Economics and Business

A Pipelined Architecture for Greek Tweets Processing

Dimitris V Pappas
Athena Research Center
Haris Papageorgiou
Athena Research Center

INDUSTRY TALK 2

IBM

Evi Lampaki

IBM Consultant

TITLE: Overview of an Enterprise Datawarehouse implementation strategy

AI/DB PANEL

MODERATOR

Stratos Idreos

Harvard University, USA

PARTICIPANTS

Ion Androutsopoulos

Athens University of Economics and Business, Greece

Yannis Ioannidis

ATHENA Research and Innovation Center & National and Kapodistrian University of Athens, Greece

Georgia Koutrika

ATHENA Research and Innovation Center, Greece

Eirini Ntoutsis

Leibniz University Hannover, Germany

Ippokratis Pandis

Amazon Web Services

Peter Triantafyllou

University of Warwick, UK



17th
HELLENIC
DATABASE
MANAGEMENT
SYMPOSIUM