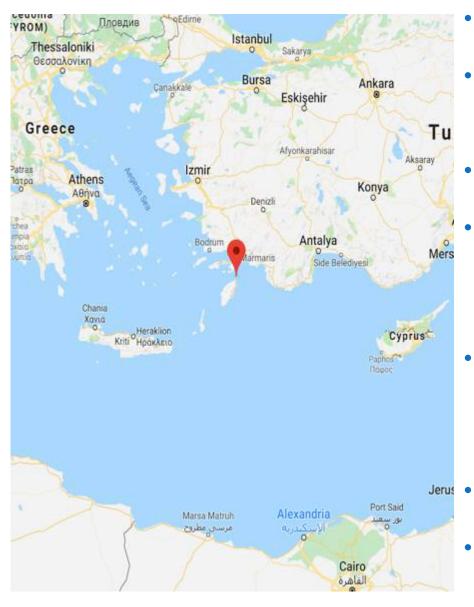
PETRA 2019

The 12th International Conference on PErvasive Technologies Related to Assistive Environments

Rhodes, Greece - June 5-7, 2019



Welcome to Rhodes



- Situated in the Southeast Aegean
- Strategic position at the crossroads of Asia, Africa and Europe
- History steeped deep in Mythology
- Survived many conquests but retained its Hellenic culture (Romans, Goths, Venetians, Ottomans, Italians....)
- Rhodes Old Town (Medieval town Palia Poli) - in the UNESCO World Heritage List
- One of the most fortified places in Europe
- https://en.wikipedia.org/wiki/Rhodes

Known as ... the rose Rhodes means rose in Greek (Poδo)

- The myth has the island emerging from the sea as a gift from Zeus to sun god HELIOS, whose wife was Rhodes, the daughter of Poseidon.
- 4th largest Island in Greece, the capital of the DODEKANESE group of islands
- 1400 sq km in area, 220 km coastline & >120,000 inhabitants
- Known as the emerald island because 37% is covered by pine and cypress trees
- island's modern emblem is the deer.
- The University of the Aegean has its school of philosophy here.



Layers & layers of historyfrom 6000 BC

- Bronze age, Archaic, Classical, Hellenistic, Roman, modern....
- During 3700 BC, was the bronze age center, influenced by the Minoans of Crete
- During 2600 BC, the Acropolis of Lindos-
- In its Golden age: 3 centuries of maritime power & prosperity due to sea trade and skilled shipbuilders
- Fame...
 - In classical times as a center of philosophy, rhetoric and literature
 - Colossus of Rhodes, one of the 7 wonders of the world
 - medieval town which is mostly "recent" history

Committees

- Program Committee
 - Dr. Oliver Korn (PC Chair) Offenburg University, Germany
 - Dr. Ahmad Lotfi (PC Associate Chair)
 Nottingham Trent University, UK
 - Dr. Panagiotis Papapetrou (PC Associate Chair) Stockholm University,
 Sweden
- Workshops Committee
 - Dr. Konstantinos Tsiakas (Chair) Yale University, USA
- Doctoral Consortium Committee
 - Dr. Eric Becker (DC Chair) University of Texas at Dallas, USA
- Organizing Committee
 - Maher Abujelala (Conference Coordinator) University of Texas at Arlington, USA
 - Dr. Fillia Makedon (Conference Chair) U. of Texas at Arlington, USA

PETRA Previous Years Statistics

- Athens 2008 37 full papers, 17 short papers, 5 posters 5 workshops
- Corfu 2009 32 full papers, 14 short papers, workshops 39 full papers, 26 short papers, 17 posters
- Samos 2010 45 full papers and 8 posters, 6 workshops • Corfu 2016
- Crete 2011 37 full papers, 7 short papers, 6 posters 5 workshops
- Crete 2012 22 full papers, 12 short papers, 9 posters 3 workshops
- Rhodes 2013 27 full papers, 22 short papers, 9 posters 3 workshops

- Rhodes 2014 37 full papers, 11 short papers, 9 posters 5 workshops
- Corfu 2015 4 workshops
- 22 full papers, 25 short papers, 21 posters 5 workshops
- Rhodes 2017 20 full papers, 21 short papers, 13 posters 6 workshops
- Corfu 2018 31 full papers, 10 short papers, 10 posters, 6 workshops

Submissions and Participants

This year PETRA attracted <u>132</u> submissions from <u>39</u> countries, and we have <u>121</u> registrations.



Accepted Papers

• Full Papers: <u>32</u>

• Short Papers: <u>8</u>

• Posters: <u>15</u>



• Workshops: <u>7</u> (<u>46</u> Papers)

Keynotes

1. Inertial Sensors - What are They, What They Measure, How They are Used and Why are They Important

Speaker: Dr. Udo Frese, University of Bremen, Germany Wednesday, June 5 @ 2:15pm

- 2. Assistive Systems at the Workplace: The Past, the Present
 - and the Future

Speaker: Dr. Oliver Korn, Offenburg University of Applied Sciences, Germany

Thursday, June 6 @ 9am

3. Biosignal-based Spoken Communication

Speaker: Dr. Tanja Schultz, University of Bremen, Germany Friday, June 7 @ 9am

Nine Conference Sessions

- 1. Human Affect, Physiology and Biosignal Analysis
- 2. Activity Recognition and Human Tracking
- 3. Pattern Recognition and Reasoning Systems
- 4. Wearable Systems and Monitoring Devices
- 5. Accessibility Tools, Methods and Applications
- 6. Reasoning Systems and Machine Learning
- 7. Assistive Robotic Systems and Human-Robot Interaction
- 8. Telepresence, Virtual and Augmented Reality
- 9. Posters

Seven Workshop Sessions

- 1. (DAEM) A Workshop on Designing Assistive Environments for Manufacturing
- 2. (AR4U) A Workshop on Assistive Robots: Technological Challenges and the User Perspective
- 3. (SmartWork) A Workshop on Smart, Personalized and Age-Friendly Working Environments
- 4. (RoboSense) A Workshop on Robotic Sensing in Human-Robot Interaction
- 5. (AGENT) A Workshop on Multimodal Signal Sensing & Analysis for Assistive Environments for Improving Quality-of-Life
- 6. (NOTION) Human Behavior Monitoring, Interpretation and Understanding Workshop
- 7. (COACH) A Workshop on Personalized Coaching for the Wellbeing of an Ageing Society

US National Science Foundation Support

• Many thanks go to the National Science Foundation (NSF) that provided Travel support to PETRA student authors:

- 1. DOCTORAL CONSORTIUM (DC) PROGRAM
 - · Support for 15 Graduate student authors (~\$30,000)
 - · NSF has supported PETRA for 12 years in a row

- 2. RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU) PROGRAM
 - NSF Support for 6 undergraduate Authors, presenting at Petra 2019

Conference Proceedings

• Conference and workshop papers are included in *PETRA'19 Conference proceedings*, which is published by ACM as a volume in the **ACM International Conference Proceedings Series (ICPS)**.

• PETRA's proceedings are now available on ACM Digital Library at: https://dl.acm.org/citation.cfm?id=3316782

Special Issue

• Authors are welcome to submit their extended work to a

Special Issue Organized by NOTION Workshop on *Human*

Behavior Monitoring, Interpretation and Understanding at

the Journal of Ambient Intelligence and Humanized

Computing (Published by Springer)



Sponsors

- National Science Foundation (NSF), USA
- College of Engineering, Univ. of Texas at Arlington (UTA), USA
- Dept. of Computer Science and Engineering at UTA, USA
- Human Centered Computing Laboratory (Heracleia at UTA, USA
- iPerform Industry-University NSF Center at UTA, USA
- National Center for Scientific Research (NCSR) Demokritos, Greece













Social Program

1. Welcome Reception

- **► Time:** Wednesday @ 6:45pm − 7:45pm
- >Location: Amphitheatre Square at Amelia Mare





- **►Time: Thursday @ 8:45pm 10:45pm**
- Location: Albatross Beach Bar
- >Accompanying persons tickets





Organizational Notes

Participants:

- ➤ Please always wear your badge during the conference Your badge contains valuable coupons which you must bring along and give to get coffee, and other social aspects
- For invoices please email petrae@uta.edu
- For attendance certificates, please pick them up from the registration Desk

Accompanying persons:

- Will need to purchase tickets for the social events, the welcome reception and the gala dinner.
- Please purchase them ONLINE at http://petrae.org/register.html and bring the confirmation email to the registration desk receipt to receive the coupon.

Much to see and do...

- Lindos Acropolis
- Acropolis of Rhodes
- Archeological Museum of Rhodes
- Medieval town of Rhodes
- Palace of the Grand
 Master of the Knights of Rhodes
- Valley of Butterflies
- Rhodes Aquarium
- and many others





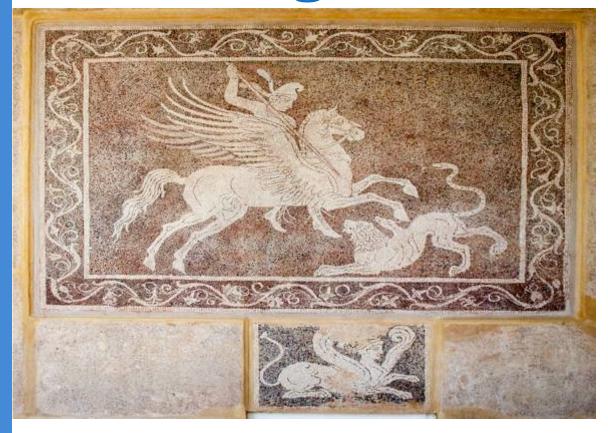








Archeological Museum of Rhodes



Mosaic floor showing Bellerophon and Chimaira



Crouching Venus



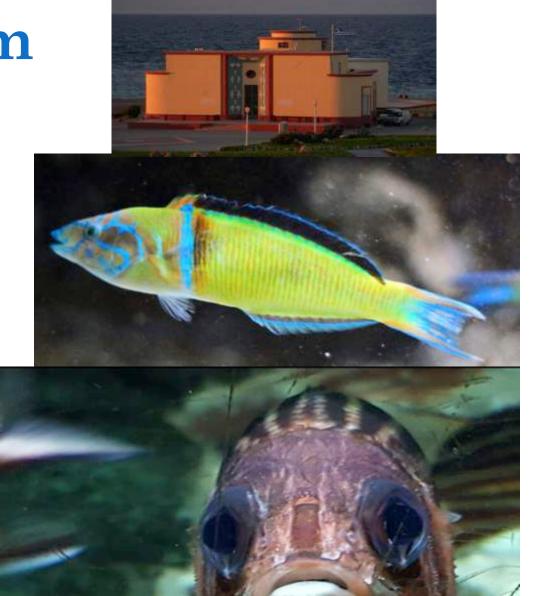
Palace of the Grand Master of the Knights of Rhodes (KASTELLO)



- 700 AD, Built as a BYZANTINE citadel
- Original location of Ancient Greek Temple of sun god HELIOS
- Then 1309 Gothic architecture grand Master
- 1522 Capture of island by the Ottomans used as command center
- Italian rule, Mussolini vacationed here
- Feb 10, 1947 Treaty of Peace with Italy- transfer of Dodekanese Islands to Greece

Rhodes Aquarium





The Valley of Butterflies



What to eat and drink!

The Original Greek Salad



Tzatziki Appetizer



Saganaki Cheese Appetizer Greek Mousaka



Frappe



Greek Coffee



Freddo Cappuccino Dessert Kataifi



Enjoy Rhodes!!!

