Papadopoulos S. Nikolaos

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Skills and Expertise

- Serious Games development, exploring innovative HCI techniques using Microsoft Kinect sensor
- Experience in game development using Unity3D game platform
- Experience in 3D animation development using Autodesk Motion Builder
- Web and mobile applications development
- Requirement Analysis
- Use case specification
- Usability Testing
- Technical Documentation
- Desktop applications development
- Website and Web-GIS development
- Database design and development
- Experience in programming: C++, C#, WPF, Asp.NET, HTML, CSS, PHP, Java, JavaScript, Python, QT, ArcObjects
- Experience in GIS-Web-GIS tools: ESRI ArcGIS Desktop, Server, Google Maps API, QGIS
- Experience in CMS (Drupal, Wordpress, Django)
- Experience in RDBMS: MySQL, NoSQL
- Knowledge of MS Windows Server/Linux

Research Interests

- 3D capturing and reconstruction
- Augmented reality
- Computer Vision algorithms
- Virtual environments

Professional Experience

- **Research Associate (September 2013 – Presence)**

Institute for Mediterranean Studies, Foundation of Research and Technology (FORTH), Laboratory of Geophysical – Satellite Remote Sensing and Archaeo-environment, Rethymno, Crete, Greece

Responsibilities & Achievements:

Desktop application development, GIS/WebGIS applications development, GeoDatabases design and development, Online Database systems implementation and administration, Geospatial data analysis and processing, Virtual-Reality applications development, Mobile applications development

Participation in R&D Projects:

- STORM: Safeguarding Cultural Heritage through Technical and Organizational Resources Management - HORIZON 2020 (2016 – 2020)
- AGROSTRAT (LIFE11 ENV/GR/951) - Sustainable strategies for the improvement of seriously degraded agricultural areas: the example of Pistachia vera L. (2012 – 2016)
- DynByzCrete: Recapturing the Dynamics of the Early Byzantine Settlements in Crete: Old problems - New Interpretations through an Interdisciplinary Approach (2014 – 2015)
- KRIPIS – POLITEIA: Culture-Technology: New technologies in research, study, documentation and accessibility in the information of items and monuments of cultural heritage (2012 – 2015)
- KRIPIS – PEFYKA: Environment and Natural Disasters: New methods to evaluate and improve the environmental quality and encounter the natural disasters (2012 – 2015)

- **Junior software developer for web and android applications (October 2012 – August 2013)**

Enverse, Arxiepiskopou Makariou 36, Heraklion, Crete, 71202

Educational background

- **M.Sc. in Computer Engineering - July 2015**
  Department of Informatics Engineering, Technological Educational Institute of Crete, Heraklion, Greece
  Grade: 8.69
  Thesis: Exergames for Parkinson's disease patients using Microsoft Kinect

- **B.Sc. in Computer Science - March 2012**
  Department of Computer Science, University of Crete, Heraklion, Greece
  Grade: 6.72
  Thesis: Local memory access analysis of irregular applications on NUMA multi-cores

Languages

- **Greek:** Native proficiency
- **English:** First Certificate in English (FCE) – University of Cambridge
- **Italian:** Certificato Medio

Scientific Publications

- **Doula, M.K., Kouloumbis, P., Sarris, A., Hliaoutakis, A., Papadopoulos, N. S., Kydonakis, A.**: *Reuse of Sewage Sludge on Soil: Terms, Preconditions and Monitoring. In Tzortzakis, N. (ed.): Municipal Solid Waste: Management Strategies, Challenges and Future Directions*. NOVA SCIENCE, 2017 (in press)
- **Pachoulakis, Ioannis, Nikolaos Xilourgos, Nikolaos Papadopoulos, and Anastasia Analyti:** *Enrichment of a Kinect-based Physiotherapy and Assessment Platform for Parkinson's disease Patients*. Advances in Image and Video Processing 5, no. 1 p.31, 2017
- **Pachoulakis, Ioannis, Nikolaos Xilourgos, Nikolaos Papadopoulos, and Anastasia Analyti.***: A Kinect-Based Physiotherapy and Assessment Platform for Parkinson's disease Patients.* Journal of medical engineering, 2016.
- **Pachoulakis, Ioannis, and Nikolaos Papadopoulos.**: *Exergames for Parkinson's Disease patients: The balloon goon game*. In Telecommunications and Multimedia (TEMU), 2016 International Conference on, pp. 1-6. IEEE, 2016.
- **Doula, M.K., Sarris, A., Hliaoutakis, A., Kydonakis, A., Papadopoulos, N. S. and Argyriou, L.:** *Building a strategy for soil protection at local and regional scale—the case of agricultural wastes landspreading*. Environmental monitoring and assessment, 188(3), pp.1-14, 2016.
- **M. K. Doula, A. Sarris, N. S. Papadopoulos, A. Hliaoutakis, A. Kydonakis, L. Argyriou, S.Theocharopoulos, Ch. Kolovos,:** *A Software for soil quality conservation at organic waste disposal areas: The case of olive mill and pistachio wastes.* In European Geosciences Union-General Assembly, Vienna, Austria, 17-22 April 2016.
- **M.K.Doula, A.Hliaoutakis, N. S. Papadopoulos, A.Kydonakis, L.Argyriou and A.Sarris,:** *Management and monitoring of agricultural waste disposal by local and regional authorities.* In Procs. of the 4th International Conference on Sustainable Solid Waste Management, Limassos, Cyprus, 23-25 June 2016.
- **A. Hliaoutakis, N.S. Papadopoulos, A.Kydonakis, L. Argyriou, M.K. Doula, A. Sarris,:** *Web GIS-based application for agricultural areas management – the case of pistachio cultivation*. In Procs. of the 4th International Conference on Sustainable Solid Waste Management, Limassos, Cyprus, 23-25 June 2016.

- **Pachoulakis, Ioannis, Nikolaos Papadopoulos, and Cleanthe Spanaki.:** *Are Game Platforms suitable for Parkinson Disease patients?*. In Proceedings of the 9th International Conference on New Horizons in Industry, Business and Education (NHIBE 2015), Skiathos Island, Greece, 27-29 August 2015.
- **Pachoulakis, I., Papadopoulos, N. and Spanaki, C.,**: *Parkinson's disease patient rehabilitation using gaming platforms: lessons learnt*. International Journal of Biomedical Engineering and Science (IJBES), Vol. 2, No. 4, October 2015.
- **Argyriou, L., Papadopoulos, S. N.**,: *Mixed reality applications, innovative 3d reconstruction techniques & GIS data integration for cultural heritage.* In Sarris, A. ed., 2015, Best Practices of GeoInformatic Technologies for the Mapping of Archaeolandscapes. Archaeopress Archaeology. Archaeopress Archaeology, Archaeopress Publishing Ltd. England, Oxuniprint, Oxford. 2015. ISBN 9781784911621. Pp. 149-158.