

### PERSONAL INFORMATION

### Antonis V. Papadopoulos

32 Essopou Str., 151 22, Maroussi, Athens, Greece

**=** +30 6973408581

a.papadopoulos@bpi.gr

Sex Male | Date of birth 20/02/1979 | Nationality Greek

### WORK EXPERIENCE

### 01/03/2019-

### New researcher

Benaki Phytopathological Institute. Athens, Greece.

 Scientific subjects: Precision agriculture, Geographical Information Systems, Spatial Decision Support Systems, Ground-based and aerial multi-spectral sensors for mapping and monitoring soils and crops, Soil analyses.

### 07/03/2013-31/12/2014 and 01/03/2015-28/02/2019

# Scientific assistant in the project "Development, implementation, evaluation and monitoring of integrated sustainable management strategies of urban farms"

Benaki Phytopathological Institute. Athens, Greece.

■ I participated in the project's proposal design and then coordinated and monitored the implementation of actions. I also involved in the implementation of a detailed soil survey, in taking soil, water and plant samples, in mapping farm's land cover and in making fertilizing recommendations. During the project I created a geodatabase which have indexed all surveys and interventions that have been made on plant and farm capital.

### 07/11/2014-30/11/2015

### Post-doctoral researcher

Hellenic Agricultural Organization-DEMETER, Institute of Soil and Water Resources, Department of Soil Science of Athens, Greece.

I developed a Spatial Decision Support System for nitrogen fertilization in cotton crop at field level. The project included data collection with Unmanned Aerial System (UAS) and ground-based multispectral sensor, management and analysis and application of results in the field. I used GIS, through which I produced maps for nitrogen fertilizer application in management zones within the experimental fields.

### 03/01/2011-30/11/2011 and 01/04/2012-31/12/2012

# Scientific assistant in the project LIFE+HydroSense (Innovative Precision Technologies For Optimised Irrigation And Integrated Crop Management In A Water-Limited Agrosystem).

Benaki Phytopathological Institute. Athens. Greece.

• My occupation involved field work (soil, weeds and cotton plants sampling), office work (report writing, statistical data analysis, map production, digital image analysis) and organization of training courses and workshops. The main objective of the work was the adaptation of plant protective inputs to respective soil conditions, weeds and pests both in space and time. I produced digital weed maps (site specific weed maps) using GIS, multispectral ground-sensors and digital camera.

### 01/12/2011-31/03/2012

# Scientific assistant in the project LIFE+EcoPest (Strategic plan for the adaptation and application of the principles for the sustainable use of pesticides in a vulnerable ecosystem).

Benaki Phytopathological Institute. Athens, Greece.

The objective of my work at LIFE+EcoPest project involved the use of geospatial simulation models and transfer of pollutants, arising from the use of pesticides in soil and water recipients in GIS environment. Also, the occupation related to the use of chemicals as a tool for evaluation of the applied plant protection strategies and in particular to the appropriate application rates, methods of application and necessary means of application control.

### 07/01/2009-06/01/2010

### Position of agronomist in the Managing Authority of the 'Rural Development Programme of Greece 2007-2013'

Administrative Sector for Community Resources and Infrastructure. Hellenic Ministry of Rural Development and Food. Athens, Greece.

■ The objective involved the management and monitoring aspects of agri-environmental measures (these measures support agricultural production methods primarily designed to protect the environment and to conserve biodiversity and agricultural landscape). My work mainly involved the action of the protection of sensitive areas in nitrate pollution.

### 07/05/2008-06/01/2009

### Position of agronomist.

Regional Laboratory for Agricultural Practices and Fertilizer Analyses, Ministry of Rural Development and Food, Lykovrissi, Athens.

• My occupation concerned field soil sampling in the area of Kopaida (Viotia Prefecture) and further laboratory soil analyses for nitrate, ammonium ion specification and for basic soil physicochemical properties. Moreover, I offered consultation to producers based on soil analyses findings.



Antonis V. Papadopoulos

### 18/03/2008-17/11/2008

Member of research group in project entitled 'Installing GIS in the Castle of Chios Area and Information Office.'

Panteion University. Institute of Civil Environment and Human Resources, Athens. Greece.

As part of my employment in the project, I improved my skills in developing geodatabases, in managing geospatial data and mapping land use in urban and rural environments using GIS.

### 01/07/2007-31/07/2008

Member of research group in project entitled 'Assessing soil conditions in Kinigos community (Messinia Prefecture), topographic and climate environment of the wider region of Western Messinia for growing grape varieties for winemaking.' Agricultural University of Athens, Greece.

 During my employment, I carried out field work (soil sampling and field mapping) in Messinia for the purpose of preparing a soil survey and respective office work (contribution to the development of Geographic Information Systems in the region).

### 01/10/2005-30/11/2005 and 02/01/2006-30/09/2007

## Scientific assistant in the project LIFE+TWIRLS (Treating Waste for Restoring Land Sustainability).

Hellenic Agricultural Organization-DEMETER, Institute of Soil and Water Resources, Department of Soil Science of Athens, Greece.

LIFE+Twirls project had as objective the environmental improvement, renovation and consolidation of Europe degraded land, using appropriately treated waste and garbage. The project area in Greece was a slate quarry nearby the National Park of Parnitha, where the ground had been excessively compressed and exhibited very poor drainage conditions. The work involved installing experimental fields, taking samples and analysing soil and compost, planting forest species using compost and soil, biodiversity monitoring and environmental protection and improvement of soil, office work and creating digital maps of experimental fields.

### 04/07/2005-31/08/2005

### Participation in the project entitled 'Geodeigma 2005'.

Institute of Soil and Water Resources, Department of Soil Science of Athens, Greece.

As part of my participation in the project, which was funded by national resources (Ministry of Rural Development and Food), I undertook office and field work concerning geographical crop sampling. Using Global Positioning System (GPS) and aerial images, crops were identified and recorded in areas of the prefectures of Viotia, Corinth, Ilia, Argolida and Chania.

### 01/05/2003-01/07/2003

## Participation in the project entitled 'Creating GIS for olive and vine crops in the Prefecture of Aitoloakarnania'.

Agricultural University of Athens, Greece.

 During my employment, I used Geographic Information Systems in cartographic mapping of land cover.

### **EDUCATION AND TRAINING**

### 19/12/2005-18/03/2010

### Doctor of Philosophy (PhD)

University: National Technical University of Athens, School: Rural and Surveying Engineering, Department: Geography and Regional Planning.

 Scientific area of Precision Agriculture. Title of Dissertation: Development of a Spatial Decision Support System for Site Specific Crop Management.

### 26/09/2003-23/02/2005

### Master of Science (MSc)

University: National Technical University of Athens, School: Rural and Surveying Engineering, Department: Geography and Regional Planning.

• Title: Environment and Development. Title of Dissertation: Environmental site evaluation and selection for the establishment of wine vineyards using Geographical Information Systems. Degree grade: 9.19.

### 07/10/1997-17/10/2002

### **Bachelor of Science**

University: Agricultural University of Athens. Department: Natural Resources Management & Agricultural Engineering. Division: Soil Science and Agricultural Chemistry. Degree grade: 8.16.

- Practice
- 01/07/2000-31/08/2000: Soil Science Institute of Athens (Hellenic Agricultural Organization 'Demeter')
- 07/07/2001-19/08/2001: Soil Science Institute of Athens (Hellenic Agricultural Organization 'Demeter')
- 01/07/2002-14/08/2002: Soil Science Institute of Athens (Hellenic Agricultural Organization 'Demeter').
- Title of Dissertation: Determination of Phosphate Fertilization under 1) Dual Balancing and 2)
   Relationship with soil properties.



### PERSONAL SKILLS

### Mother tongue(s)

#### Greek

### Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2

English

Learning Resource Network (LRN) Level 3 Certificate in ESOL International (CEF C2)

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Common European Framework of Reference for Languages

### Communication skills

· Good communication and training skills which were acquired through the supervision of undergraduate and postgraduate students. More specifically I participated in graduate lessons in 'Geography and Spatial Analysis' (5th semester) and 'Geographical Information Systems' (6th semester), National Technical University of Athens, School of Rural and Surveying Engineering, Department of Geography and Regional Planning and in Postgraduate lessons in 'Geographical Information Systems and Mountainous Environments' (Interdisciplinary Programme of Postgraduate Studies 'Environment and Development of Mountainous Regions').

### Organisational / managerial skills

- Good organisational skills which were acquired through the organisation of the following events, training courses and workshops:
- 13/12/2006: Workshop entitled "Bio-Restoration of Degraded Landscapes: The Case of Quarry Kamari". Conference Room Factory Titan in Kamari. Organizers: Soil Science Institute of Athens (Hellenic Agricultural Organization 'Demeter') and TITAN S.A.
- 07-11/02/2011: Training open-day entitled "Innovative Precision Technologies For Optimised Irrigation And Integrated Crop Management in A Water-Limited Agrosystem." Nice cultural center in Larissa. Organizers: Benaki Phytopathological Institute, Institute of Soil Mapping and Classification (Hellenic Agricultural Organization 'Demeter') and Municipality of Nice.
- 20/07/2011: Training open-day entitled "Innovative Precision Technologies For Optimised Irrigation And Integrated Crop Management in A Water-Limited Agrosystem." Omorfochori Larissa. Organizers: Benaki Phytopathological Institute, Institute of Soil Mapping and Classification (Hellenic Agricultural Organization 'Demeter')
- 20 and 27/03/2012: Closing Ceremonies of the project LIFE+EcoPest (Strategic plan for the adaptation and application of the principles for the sustainable use of pesticides in a vulnerable ecosystem) in Livadia Viotia (Kria Conference Center). Organizers: Benaki Phytopathological Institute and colleagues of LIFE+EcoPest
- 05/12/2012: Workshop entitled "Innovative Precision Technologies For Optimised Irrigation And Integrated Crop Management in A Water-Limited Agrosystem." Agricultural University of Athens (Library Hall). Organizers: Benaki Phytopathological Institute and Agricultural University of Athens.
- 27/05/2015: Training of farmers, agriculturalists and cooperative stakeholders, in Chaeronia Viotia regarding the scope and objectives of postdoctoral research implemented in Hellenic Agricultural Organization 'Demeter entitled "Development and implementation of spatial decision support system for nitrogen fertilization at field level "
- 28-29/05/2015: Member of the Scientific Committee of the 1st Conference on Geographic Information Systems and Spatial Analysis in Agriculture and the Environment. Conference Auditorium Agricultural University of Athens. Organizers: Research Unit of Geographic Information Systems and Greek Society of Geographic Information Systems.
- 25-26/05/2017: Member of the Scientific Committee of the 2<sup>nd</sup> Conference on Geographic Information Systems and Spatial Analysis in Agriculture and the Environment. Conference Auditorium Agricultural University of Athens. Organizers: Research Unit of Geographic Information Systems and Greek Society of Geographic Information Systems.

Job-related skills

### Digital competence

SELF-ASSESSMENT					
Information processing	Communication	Content creation	Safety	Problem solving	
Proficient user	Proficient user	Proficient user	Independent user	Independent user	

Levels: Basic user - Independent user - Proficient user

Digital competences - Self-assessment grid



### Antonis V. Papadopoulos

Through educational studies and the constant use of personal computers and software applications, I have acquired certain experience in the following:

- WINDOWS XP, VISTA, 7, 8, 8.1, 10
- LINUX UBUNTU
- ADOBE ACROBAT X PROFESSIONAL (Portable Document Format)
- ADOBE PHOTOSHOP
- ARCGIS
- GLOBAL MAPPER
- MATLAB
- MICROSOFT OFFICE 10
- QUANTUM GIS
- SIGMAPLOT
- SPSS STATISTICS
- STATGRAPHICS
- SYSTAT
- Fortran

Other skills

Driving licence

Category B.

### ADDITIONAL INFORMATION

### **Publications**

- Papadopoulos, A., Kalivas, D., Hatzichristos, T., 2011. "Decision support system for nitrogen fertilization using fuzzy theory". Computers and Electronics in Agriculture, 78 (2), pp. 130-139.
- Streibig, J.C., Rasmussen, J., Andújar, D., Andreasen, C., Berge, T.W., Chachalis, D., Dittmann, T., Gerhards, R., Giselsson, T.M., Hamouz, P., Jaeger-Hansen, C., Jensen, K., Jørgensen, R.N., Keller, M., Laursen, M., Midtiby, H.S., Nielsen, J., Müller, S., Nordmeyer, H., Pateinatos, G., Papadopoulos, A., Svensgaard, J., Weis, M., Christensen, S., 2014. "Sensor-based assessment of herbicide effects". Weed Research, 54 (3), pp. 223-233.
- Kasiotis, K.M., Emmanouil, C., Anastasiadou, P., Papadi-Psyllou, A., Papadopoulos, A., Okay, O., Machera, K., 2014. "Organic pollution and its effects in the marine mussel Mytilus galloprovincialis in Eastern Mediterranean coasts". Chemosphere, 119, pp. S145-S152.
- Papadopoulos, A., Kalivas, D., Hatzichristos, T., 2015. "GIS Modelling for Site-Specific Nitrogen Fertilization towards Soil Sustainability". Sustainability, 7 (6), pp. 6684-6705.
- Kasiotis, K.M., Anastasiadou, P., Papadopoulos, A., Machera, K., 2017. "Revisiting Greek Propolis: Chromatographic Analysis and Antioxidant Activity Study". PLoS ONE 12(1): e0170077.https://doi.org/10.1371/journal.pone.0170077.
- Papadopoulos, A., Kalivas, D., Theocharopoulos, S., 2017. "Spatio-temporal monitoring of cotton cultivation using ground-based and airborne multispectral sensors in GIS environment". Environmental Monitoring and Assessment, 189: 323, doi:10.1007/s10661-017-6042-z.
- Papadopoulos, A., Kati, V., Chachalis, D., Kotoulas V., Stamatiadis, S., 2018. "Weed mapping in cotton using ground-based sensors and GIS". Environmental Monitoring and Assessment, doi: 10.1007/s10661-018-6991-x.

### Conferences

- Christou, M., Avramides, E., Papadopoulos, A., Menidiates, Ch., Kouloumbis, P., 2006. "Bioremediation of a Greek schist quarry using compost from urban wastes". 2<sup>nd</sup> International Conference on Advances in Mineral Resources Management and Environmental Geotechnology, AMIREG, Chania, Greece, pp. 551-554.
- Christou, M., Avramides, E., Papadopoulos, A., Menidiates, Ch., Kouloumbis, P., 2006. "Bioremediation of a Greek schist quarry using compost from city wastes". 2<sup>nd</sup> International Conference on Advances in Mineral Resources Management and Environmental Geotechnology, Poster presentation, AMIREG, Chania, Greece.
- Papadopoulos, A. and Kalivas, D., 2007. "Expert Systems and GIS in precision agriculture.
   Case study: cotton cultivation". 1st International Conference on Environmental Management,
   Engineering, Planning and Economics (CEMEPE), Skiathos, Greece, Vol. III, pp. 2176-2182.
- Papadopoulos, A., Christou, M., Avramides, E., Williamson, J., Jones, D. Tandy, S. Menidiates, Ch., 2007. "Addressing the restoration of degraded land in Europe using waste materials. A schist quarry in Greece". 1st International Conference on Environmental Management, Engineering, Planning and Economics, (CEMEPE), Skiathos, Greece, Vol. III, pp. 601-606.
- Papadopoulos, A., and Kalivas, D., 2008. "GIS modelling capabilities in optimizing nitrogen fertilizing management". Publication in the proceedings of the International Conference:



- Protection and Restoration of the Environment IX, Kefalonia, Greece, 29/06/08-03/07/08.
- Papadopoulos, A., and Kalivas, D., 2009. "Fuzzy decision support system for assessing nitrogen fertilization in agricultural land". CD Proceedings of the 2<sup>nd</sup> International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) & SECOTOX Conference, Mykonos, Greece. ISBN 978-9606865-09-1.
- Papadopoulos, A., and Chachalis, D., 2012. "Weed mapping in cotton using proximal and remote sensing under GIS environment". Publication in the proceedings of the 1<sup>st</sup> RHEA International Conference on Robotics and associated High-technologies and Equipment for Agriculture, University of Pisa, Italy, September 19-21.
- Papadopoulos, A., Chachalis, D., Kati, V., Kotoulas, V., Stamatiadis, S., 2013. "Site Specific Weed Management in Cotton". Poster Presentation, WSSA Meeting in Baltimore, Maryland, USA, February 4-7.
- Papadopoulos, A., Chachalis, D., Kati, V., Stamatiadis, S., 2013. "Weed mapping in cotton using proximal and remote sensing". Poster Presentation, 16<sup>th</sup> European Weed Research Society (EWRS) Symposium in Samsun, Turkey, June 24-27.
- Papadopoulos, A., Theocharopoulos, S., Kalivas, D., Stamatiadis, S., 2015. "Development and Application of a Spatial Decision Support System in Nitrogen Fertilization at Field Scale". Poster Presentation, 10<sup>th</sup> European Conference on Precision Agriculture (ECPA), Volcani Center, Israel, July 12-16.
- Katsenios, N., Kavvadias, V., Theocharopoulos, S., Bilalis, D., Ioannou, Z., Papadopoulos, A., Liakopoulou, N., 2015. "Influence of Pulsed Electromagnetic Field on Plant Growth, Nutrient Absorption and Yield of Durum Wheat". 14<sup>th</sup> International Symposium "Prospects for 3<sup>rd</sup> Millennium Agriculture", Cluj-Napoca, Romania, 24 26 September.
- Papadopoulos, A., Kolovos, C., Troyanos, Y., Doula, M., 2017. "Development of web-based GIS services for sustainable soil resource management at farm level". Poster Presentation, 5<sup>th</sup> International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus, 20-23 March.
- Papadopoulos, A., Kalivas, D., Theocharopoulos, S., 2017. "Delineation of fertilizing management zones using remote sensing and GIS at field scale".6<sup>th</sup> International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference, Thessaloniki, Greece, 25-30 June.
- Kostopoulos, P., Troyanos, Y., Papadopoulos, A., Psychogiou, M., Diplarou, E., Doula, M.K., 2017. "Lettuce irrigation with pistachio wastewater: Quality of leachates and risk for groundwater reservoirs". Poster Presentation, 6<sup>th</sup> International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference, Thessaloniki, Greece, 25-30 June.
- Papadopoulos, A., Kalivas, D., Hatzichristos, T., 2010. 'Development of a spatial decision support system in crop fertilization.' 6<sup>th</sup> National conference of the Greek Association of Geographic Information Systems (HellasGIs), Athens.
- Papadopoulos, A., Chachalis, D., Kati, V., Kotoulas, V., 2012. 'Mapping weeds with the use of ground-based and remote-sensed data.' 17th National Scientific Conference of Greek Weed Science Association, pp. 81-83, Agricultural University of Athens, 22-24 November.
- Papadopoulos, A., Theocharopoulos, S., Kalivas, D., Stamatiadis, S., 2015. 'Development and implementation of a Spatial Decision Support System for nitrogen fertilization at field level.' 1st Conference of Geographic Information Systems and Spatial Analysis in Agriculture and Environment, Agricultural University of Athens, May 28-29.
- Papadopoulos, A., Kalivas, D., Theocharopoulos, S., 2017. 'Spatial and temporal specific monitoring of cotton with ground-based multispectral sensor and UAS'. 2<sup>nd</sup> Conference of Geographic Information Systems and Spatial Analysis in Agriculture and Environment, Agricultural University of Athens, May 25-26.
- Aggelopoulos, N., Stateras, D., Papadopoulos, A., Priovolou, A., Kalivas, D., 2019. "Geospatial technologies in spatially defined viticulture: Case study of a vineyard with Agiorgitiko variety in Koutsi, Nemea, Greece". Poster Presentation, 21st GiESCO International Meeting "A multidisciplinary Vision towards Sustainable Viticulture", 23 June-28 June, 2019, Thessaloniki, Greece.



### Antonis V. Papadopoulos

Articles-Presentations in open days-Meetings

- Article: «Environment and Development of Greek Winery», Apogevmatini newspaper, Publication Information: Date: 10/4/2005, Sheet: 16,720 (1,070), p. 50.
- Papadopoulos A., 2005. « Evaluation of Soil and Climatic Environment for Cultivation of Wine Varieties with the Use of Geographical Information Systems». Workshop "Geography and Modern Trends" of Hellenic Geographic Society (HellasGIs), NTUA, Athens.
- Papadopoulos, A., 2006. "Quarry Reclamation Study in Kamari, Viotia". Workshop "Bio-Restoration of Degraded Landscapes. The Case of the Kamari Quarry of Viotia", organized by the Institute of Soil Science of Athens (ELGO -" Dimitra ") and TITAN Cement S.A., Kamari, Viotia. December 13th.
- Chachalis, D., Kati, V., Papadopoulos, A., Kotoulas, V., 2012. "Site-specific weed control in the HydroSense program". 2<sup>nd</sup> Workshop, Agricultural University of Athens, December 5<sup>th</sup>.
- 17/02/2003-17/04/2003: Seminar on Geographic Information Systems (GIS). Duration: 100 hours. Agricultural University of Athens.
- 22-24/02/2011: Seminar on "Introduction to the Geographic Information System (GIS)-ArcGIS I" (ArcInfo – ArcView version 10.x. Marathon Data Systems).

Technical reports

Seminars

- Nason, M., Williamson, J., Tandy, S., Christou, M., Jones, D., Healy, J., 2007. Using organic
  wastes and composts to remediate and restore land: best practice manual. School of the
  Environment and Natural Resources, Bangor University, Wales. Participation in the writing of
  Best Practice Manual.
- Papadopoulos, A., 2012. «Application of the tool FOOT-CRS in the framework of Action 8 of the project LIFE+EcoPest». LIFE+EcoPest Technical Report (Strategic plan for the adaptation and application of the principles for the sustainable use of pesticides in a vulnerable ecosystem), Benaki Phytopathological Institute.
- LIFE+EcoPest «Sustainable Use of Pesticides in a vulnerable ecosystem». Participation in the writing of Layman's Report (2012), Benaki Phytopathological Institute.
- LIFE+HydroSense «Innovative Precision Technologies for Optimised Irrigation And Integrated Crop Management In A Water-Limited Agrosystem». Writing of the Technical Report of the works accomplished during 2012 as part of the Final Report of the project. Benaki Phytopathological Institute.
- LIFE+HydroSense «Innovative Precision Technologies for Optimised Irrigation And Integrated Crop Management In A Water-Limited Agrosystem». Participation in the writing of Layman's Report (2013), Benaki Phytopathological Institute.

Honours and awards

- 1997-1998: Annual performance scholarship (State Scholarships Foundation).
- 1999-2000: Award (Agricultural University of Athens).
- 1999-2000: Annual performance scholarship (State Scholarships Foundation).
- 2000-2001: Annual performance scholarship (State Scholarships Foundation).
- 2003-2004: Scholarship for Postgraduate studies MSc. (State Scholarships Foundation).
- 2005-2007: Scholarship for Postgraduate studies PhD. (State Scholarships Foundation).
- 2008-2009: Scholarship for Postgraduate studies PhD (National Technical University of Athens – Research Account Funds).