

Panagiotis Christodoulou

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Personal Data

First name: Panagiotis
Last name: Christodoulou
Date of birth: 13/12/1989
Nationality: Cypriot
Education: Civil Engineering
ORCID ID: 0000-0002-3238-2504

Education

09/2015 - 04/2020 | Ph.D. in Civil Engineering | Cyprus University of Technology

- Ph.D. Thesis: Reducing Statistical Uncertainty in Geotechnical Engineering Design Relying on Targeted Field Investigation: A Random Field Approach.
Supervisor: Associate Professor Dr. Lysandros Pantelidis

09/2013 - 10/2014 | M.Sc. in Civil Engineering and Sustainable Design | Cyprus University of Technology

- M.Sc. Thesis: Probabilistic Analysis of Shallow Foundations with Finite Elements in Combination with the Method of Random Fields.

10/2008 - 02/2013 | B.Sc. in Civil Engineering | Frederick University

- Final Year Project: Reliability Analysis of Soil Liquefaction Based on SPT Data.

Professional Experience

06/2020 - Today | Civil Engineer | IMATECHKOUNNA

Tendering Manager

- Coordination of the tendering department.
- Analyze and manage issues and risks during the bidding process.
- Awarded Tenders of more than 15 million euros in total.

06/2016 - 06/2020 | Consultant Civil Engineer / Geotechnical Engineer | Self-employed

In collaboration with Dr. Kyriakos Kyrou (former Director of WDD).

Main Projects:

1. Design and construction of an earthen recycled water storage reservoir with a capacity of 145,000m³ in Minthis Hills in Tsada, Paphos, Cyprus
2. Stability assessment and improvement of spillway of Vasiliko cement plan reservoir
3. Design and construction of small storage reservoir (~5.000 m³) in Anarita Paphos,
4. Upgrading and stabilization of the Ha-Potami dam in Paphos, Cyprus
5. Design of a 40.000m³ recycled water storage reservoir in Maroni, Larnaca, Cyprus

6. Stabilization of slopes with micro-piles in Paphos, Cyprus

11/2015 – 05/2016 | Civil Engineer | Water Development Department

- Design of four groundwater recharging ponds near Xeros river in Paphos, Cyprus.
 - Design of a weir across the width of a Ezousa river in Paphos, Cyprus.
 - Prepare statistical analysis and cross section observation of groundwater table of Androlikou aquifer (in Paphos).
- Supervisor: Kokos Ioannou (Christodoulou), Hydrologist

Academic Experience

TEACHING

01/2022 - Today	Cyprus University of Technology, Faculty of Engineering and Technology, Department of Civil Engineering and Geomatics Position: Special Scientist Course: CIV531 Sustainable geotechnical design (Master coarse)
09/2015 - 04/2020	Cyprus University of Technology, Faculty of Engineering and Technology, Department of Civil Engineering and Geomatics Position: Teaching Assistant Course: CIV226 Soil Mechanics (Undergraduate coarse)

11/2015 - 11/2019 | Research Fellow | Cyprus University of Technology

Research in “Geotechnical Engineering” on the following topics (supervisor Associate Professor Dr. Lysandros Pantelidis):

1. Modeling of earth pressure calculation method under static and seismic conditions, with the advanced programming language “Python 3” – (14/10/2022 -14/11/2022)
2. Reducing statistical uncertainty in elastic bearing capacity analysis of isolated and interfering shallow foundations relying on target field investigation – (19/6/2020 – 19/7/2020)
3. The application of the optimal field sampling methodology proposed by Panagiotis Christodoulou and Dr Lysandros Pantelidis – (11/11/2019 -29/11/2019)
4. Effect of soil sampling on the reliability of shallow foundation elastic settlement (16/09/2019 - 31/10/2019) and bearing capacity design – (17/06/2019 -31/07/2019)
5. Preparation of RFEM code using the programming language FORTRAN, for the problem “Reliability based analysis of rocks slope against planar failure using different factoring strategies.” - (15/10/2018 -15/11/2018)
6. Preparation of RFEM code using the programming language FORTRAN, for the problem of shallow foundation in the crest of a slope. – (20/05/2018 - 29/06/2018)
7. Research in “Geotechnical Engineering”. The research is concerned with the estimation of soil spatial correlation length of random fields - (01/10/2017 - 08/12/2017)

8. Research in “Stochastic Geotechnical Engineering”. Within the concerns of the Horizon 2020 program. (01/10/2015 - 31/10/2015)
9. Research in “Effect of soil heterogeneity in foundations”. The research is concerned with modelling the soil with random fields and field tests. (20/11/2015 - 30/11/2015)

List of publications:

1. Pantelidis, L., & **Christodoulou, P.** (2022). Comparing Eurocode 8-5 and AASHTO methods for earth pressure analysis against centrifuge tests, finite elements, and the Generalized Coefficients of Earth Pressure.
2. **Christodoulou, P.**, Pantelidis, L., & Gravanis, E. (2021). A Comparative Assessment of the Methods-of-Moments for Estimating the Correlation Length of One-Dimensional Random Fields. *Archives of Computational Methods in Engineering*, 1-19.
3. **Christodoulou, P.**, Pantelidis, L., & Gravanis, E. (2020). The Effect of Targeted Field Investigation on the Reliability of Axially Loaded Piles: A Random Field Approach. *Geosciences*, 10(5), 160.
4. **Christodoulou, P.**, Pantelidis, L., & Gravanis, E. (2020). The Effect of Targeted Field Investigation on the Reliability of Earth-Retaining Structures in Passive State: A Random Field Approach. *Geosciences*, 10(3), 110.
5. **Christodoulou, P.**, & Pantelidis, L. (2020). Reducing Statistical Uncertainty in Elastic Settlement Analysis of Shallow Foundations Relying on Targeted Field Investigation: A Random Field Approach. *Geosciences*, 10(1), 20.
6. Gravanis, E., Pantelidis, L., & **Christodoulou, P.** (2020). An Analytical Random Field Solution for the Reliability of Axially Loaded Piles in the Ultimate Limit State Considering the Effect of Soil Sampling. *Geosciences*, 10(7), 269.
7. **Christodoulou, P.**, Pantelidis, L., & Gravanis, E. (2019). The effect of targeted field investigation on the reliability of earth-retaining structures in active state. *Applied Sciences*, 9(22), 4953.
8. Pantelidis, L., & **Christodoulou, P.** (2017). Spatial Correlation length of clay soils in practice and its influence in probabilistic bearing capacity analysis. In *Geo-Risk 2017* (pp. 487-496).

Computer Skills

1. Good command of Random Finite Element Method (RFEM) geotechnical software.
2. Fluent in programming languages Fortran 95 and Python 3
3. Good command of RocScience geotechnical programs rs2 and slide2D.
4. Good command of AutoCAD Civil 3D designing software
5. Excellent command of Microsoft Office tools (Holder of ECDL certificate)

Field and laboratory experience

Geotechnical Investigations using Pagani TG63-100

- Dynamic Penetrometer Heave (DPH), Cone Penetration Test (CPT), Standard Penetration Test (SPT)

Laboratory experience on the following tests:

- Unconfined Compression, Triaxial, Fall cone for liquid limit, Wet and dry sieve analysis, pycnometer test.

Languages

- Greek -Native language
- English- Independent user

Member of Chambers

- Member of the Cyprus Scientific and Technical Chamber
- Member of the Cyprus Association of Civil Engineers
- Member of Cypriot Society of Soil Mechanics and Geotechnical Engineering

Additional Information

- Driving license (B)
- Military services completed
- Holder of first aid certificate.

References

- Available on request