

# Dr Paraskevas Stratis

## Curriculum Vitae

Technical University of Crete  
School of Mineral Resources Engineering  
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### Education

- 2009-2017 **PhD in Computational and Applied Mathematics**  
Technical University of Crete, School of Production Engineering Management,  
Chania, Greece  
Applied Mathematics and Computers Laboratory  
PhD Dissertation: *High Order approximations and stochastic optimization for  
models of saltwater intrusion in coastal aquifers*  
◦ Supervisor: Professor Yiannis Saridakis
- 2003-2005 **MSc in Pure Mathematics**  
University of Crete, Department of Mathematics, Heraklion, Greece  
◦ Thesis: *Minimization of the Euclidean norm of the SOR and MSOR Operators*  
(in Greek)  
◦ Supervisor: Professor Apostolos Hadjidimos
- 1997-2002 **BSc in Mathematics**  
Aristotle University of Thessaloniki, Department of Mathematics, Thessaloniki,  
Greece

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### Languages

- Self-assessment European level CEFR (C2 maximum evaluation)

		Comprehension		Speaking		Writing
		Listening	Reading	Interaction	Production	
Greek	Mother Tongue	C2	C2	C2	C2	C2
English	Advanced	C1	C1	C1	C1	C1

- Certificate: First Certificate in English (FCE), University of Cambridge

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### Computer Skills

- Languages Matlab, Fortran, C,  $\LaTeX$
- Platforms Windows, Linux, Mac OS
- Tools ArgusONE (PTC), MS Office, OpenOffice
- Certificates ◦ Certificate in Informatics (Aristotle University of Thessaloniki, Department of  
Mathematics, 2002).

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### Research experience

- 2009-Today Member of the Applied Mathematics and Computers Laboratory, Technical  
University of Crete, School of Production Engineering Management

07/2014-08/2015 Thales - *MATENVMED - Advanced mathematical methods and software platform for solving multiphysics, multidomain problems on modern computer architectures: Applications to Environmental Engineering and Medical problems*, NSRF 2007-2013, Operational Programmes, Lifelong Learning and Religious Affairs, Priority Axis 10

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## Research Recognition and Awards

06/2012-05/2014 Scholar of the Special Research Funds Account of the Technical University of Crete, Basic Research Programme 80794, Project Title: Strengthening Research Activities TUC 2012

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## Conference publications

◦ **Stratis P.**, Dokou Z., Karatzas G., Papadopoulou E. and Saridakis Y., *Optimization and Numerical Simulation for Pumping Management of the Hersonissos Freshwater Coastal Aquifer in Crete*, Procs. of INASE/CSCC-WHH 2015, Recent Advances in Environmental and Earth Sciences and Economics, 329-334, Zakynthos, 2015.

◦ **Stratis P.**, Saridakis Y., Papadopoulou E. and Zakyntthinaki M., *ALOPEX stochastic optimization for pumping management in freshwater coastal aquifers*, Journal of Physics: Conference Series, 490, 012112, 2014.

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## Journal publications

◦ **Stratis P.**, Dokou Z., Karatzas G., Papadopoulou E. and Saridakis Y., *Stochastic optimization for an analytical model of saltwater intrusion in coastal aquifers*, PLoS ONE 11(9), DOI: 10.1371/journal.pone.0162783, 2016.

◦ **Stratis P.**, Dokou Z., Karatzas G., Papadopoulou E. and Saridakis Y., *PTC simulations, stochastic optimization and safety strategies for groundwater pumping management: case study of the Hersonissos Coastal Aquifer in Crete*, Applied Water Science 7 (5), DOI 10.1007/s13201-016-0438-8, 2016.

◦ Athanasakis I., Dokou Z., Mathioudakis E., **Stratis P.** and Vilanakis N., *Combining Stochastic Optimization and Numerical Methods Software for the Pumping Management of Coastal Aquifers: Case Study of a Rectangular Homogeneous Aquifer*, International Journal of Mathematical Models and Methods in Applied Sciences, 9:740-747, ISSN:1998-0140, 2015.

◦ Hadjidimos A. and **Stratis P.**, *Minimization of the Spectral Norm of the SOR Operator in a mixed case*, ETNA, Volume 28, pp 78-94, 2007.

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## Teaching experience

02/2017-08/2018 **Co-Teaching**,  
Undergraduate Course *Calculus II*  
Technical University of Crete, MRED, Chania, Crete

02/2015-08/2018 **Teaching Assistant**,  
Undergraduate Course *Numerical Analysis*  
Technical University of Crete, PEM, ENVENG, Chania, Crete

09/2017-01/2018 **Co-Teaching**,  
Postgraduate Course *Data Analysis and Modeling*  
Technical University of Crete, MRED, Chania, Crete

- 09/2017-01/2018 **Co-Teaching**,  
Undergraduate Course *Calculus I*  
Technical University of Crete, MRED, Chania, Crete
- 02/2015-08/2017 **Teaching Assistant**,  
Undergraduate Course *Calculus II*  
Technical University of Crete, MRED, Chania, Crete
- 02/2015-08/2017 **Teaching Assistant**,  
Undergraduate Course *Numerical Analysis*  
Technical University of Crete, PEM, ENVENG, Chania, Crete
- 09/2015-01/2017 **Teaching Assistant**,  
Undergraduate Course *Calculus I*  
Technical University of Crete, MRED, Chania, Crete
- 09/2015-01/2017 **Teaching Assistant**,  
Undergraduate Course *Numerical Linear Algebra*  
Technical University of Crete, PEM, ENVENG, MRED, Chania, Crete
- 02/2007-08/2012 **Teaching Assistant**,  
Undergraduate Course *Numerical Analysis*  
Technical University of Crete, Department of Sciences, Chania, Crete
- 09/2007-01/2012 **Teaching Assistant**,  
Undergraduate Course *Numerical Linear Algebra*  
Technical University of Crete, Department of Sciences, Chania, Crete
- 09/2004-01/2005 **Teaching Assistant**,  
Undergraduate Course *Linear Algebra I*  
University of Crete, Department of Mathematics, Heraklion, Crete
- 02/2004-08/2004 **Teaching Assistant**,  
Undergraduate Course *Calculus II*  
University of Crete, Department of Mathematics, Heraklion, Crete
- 02/2004-08/2004 **Teaching Assistant**,  
Undergraduate Course *Calculus I*  
University of Crete, Department of Mathematics, Heraklion, Crete