

Nikolaos Arvanitopoulos

GR-EN-DE-FR

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Date of Birth: 05/01/1988
Nationality: Greek

Education

- 2013 - 2016 Doctoral student at École Polytechnique Fédérale de Lausanne (EPFL), Image and Visual Representation Group (IVRG), Switzerland
- 2011 - 2013 Doctoral student at École Polytechnique Fédérale de Lausanne (EPFL), Laboratory for Probabilistic Machine Learning (LAPMAL), Switzerland
- 2009 - 2011 MSc. in Visual Computing, Department of Computer Science, Saarland University, Germany
- 2005 - 2009 BSc. in Computer Science, Aristotle University of Thessaloniki, Greece

Technical Skills

- Fluent in MATLAB
- Good Knowledge of C/C++, OpenCV
- Knowledge of Java, Mathematica, L^AT_EX, SVN
- Knowledge of Armadillo Linear Algebra Package
- Software: <http://sourceforge.net/projects/ecocpak/>

Scientific Interests

- Image Processing
- Machine Learning
- Handwriting Recognition
- Computer Vision
- Numerical Optimization

Working/Teaching Experience

- Spring 2014 Teaching Assistant, Digital Photography, École Polytechnique Fédérale de Lausanne
- Autumn 2013 Teaching Assistant, Foundations of Imaging Science, École Polytechnique Fédérale de Lausanne
- Spring 2013 Teaching Assistant, Signal Processing for Communications, École Polytechnique Fédérale de Lausanne
- Autumn 2012 Teaching Assistant, Linear Algebra, École Polytechnique Fédérale de Lausanne
- Spring 2012 Teaching Assistant, Pattern Recognition and Machine Learning, École Polytechnique Fédérale de Lausanne
- Spring 2011 Teaching Assistant, Differential Equations in Image Processing and Computer Vision, Saarland University

Scholarships - Memberships

- 2009 - 2011 Scholarship from the International Max Planck Research School for Computer Science
- 2009 - Today Student member of IEEE, IEEE Computer Society, IEEE Signal Processing Society

Attended Conferences

- 8th International Computer Vision Summer School, Sicily, Italy, 13-19 July 2014
- 25th International Conference on Digital Humanities, Lausanne, Switzerland, 7-12 July 2014
- 2nd International Document Image Processing Summer School, Fournoi, Greece, 26-20 May 2014
- 29th International Conference on Machine Learning, Edinburgh, Scotland, 26 June - 1 July 2012
- 20th International Conference on Pattern Recognition, Istanbul, Turkey, 23-26 August 2010
- 6th Hellenic Conference on Artificial Intelligence, Athens, Greece, 4-7 May 2010
- 18th European Conference on Artificial Intelligence, Patras, Greece, 21-25 July 2008

Publications

Nikolaos Arvanitopoulos, Dimitrios Bouzas, and Anastasios Tefas. Mutual Information Measures for Subclass Error-Correcting Output Codes Classification. In *Hellenic Conference on Artificial Intelligence*, pages 19–28, 2010.

Nikolaos Arvanitopoulos, Dimitrios Bouzas, and Anastasios Tefas. Subclass Error Correcting Output Codes using Fisher's Linear Discriminant Ratio. In *International Conference on Pattern Recognition*,

pages 2953–2956, 2010.

Nikolaos Arvanitopoulos, Claudio Santelli, Matthias Seeger, and Sebastian Kozerke. Divergence-free phase contrast MRI. In *International BASP Frontiers Workshop*, 2013.

Nikolaos Arvanitopoulos and Sabine Süsstrunk. Binarization-free Text Line Extraction for Historical Manuscripts. In *Digital Humanities*, pages 83–85, July 2014.

Nikolaos Arvanitopoulos and Sabine Süsstrunk. Seam Carving for Text Line Extraction on Color and Grayscale Historical Manuscripts. In *International Conference on Frontiers in Handwriting Recognition, to appear*, 2014.

Dimitrios Bouzas, Nikolaos Arvanitopoulos, and Anastasios Tefas. Optimizing Subclass Discriminant Error Correcting Output Codes using Particle Swarm Optimization. In *International Joint Conference on Neural Networks*, 2010.

Dimitrios Bouzas, Nikolaos Arvanitopoulos, and Anastasios Tefas. Optimizing Linear Discriminant Error Correcting Output Codes Using Particle Swarm Optimization. In *International Conference on Artificial Neural Networks*, 2011.

Dimitrios Bouzas, Nikolaos Arvanitopoulos, and Anastasios Tefas. Graph Embedded Non-Parametric Mutual Information For Supervised Dimensionality Reduction. *IEEE Transactions on Neural Networks and Learning Systems*, to appear, 2014.

Speaking Languages

Greek	Mother Tongue
English	First Certificate in English (University of Cambridge), 2000, B2 equivalent Certificate of Proficiency in English (University of Michigan), 2002, C2 equivalent Test of English as a Foreign Language (TOEFL) iBT, 2009, 98/120
German	Zertifikat Deutsch, Zentrale Mittelstufe Prüfung, Kleines Deutsches Sprachdiplom, 2008, C1 equivalent
French	Elementary proficiency, B1 equivalent

Hobbies

Music Studies	Theoretical studies (9 years), Practical piano studies (12 years)
Other	Skiing, Swimming, Sailing, Biking, Hiking, Photography

References

Sabine Süsstrunk, Adjunct Professor, École Polytechnique Fédérale de Lausanne, Switzerland
Joachim Weickert, Professor, Saarland University, Germany
Anastasios Tefas, Assistant Professor, Aristotle University of Thessaloniki, Greece
Constantine Kotropoulos, Associate Professor, Aristotle University of Thessaloniki, Greece