

# Emmanouil Rigas

## EDUCATION

**February 2013 – November 2018**      **Aristotle University of Thessaloniki, Department of Informatics**

PhD in Computer Science, Grade: “Excellent”  
Thesis topic: “Artificial Intelligence Methods for the Management of Electric Vehicles in the Smart Grid”  
Supervisor: Prof. Nick Bassiliades.  
Co-supervisors: Prof. Sarvapali D. Ramchurn,  
Prof. Ioannis Vlahavas.

**September 2011 – September 2012**      **University of Southampton, School of Electronics and Computer Science**

MSc Web Technology, with Distinction.  
Dissertation topic: “Congestion Management for Electric Vehicles Charging in Urban Environments”.  
Supervisor: Prof. Sarvapali D. Ramchurn.

**September 2006 – March 2011**      **Aristotle University of Thessaloniki, Department of Informatics**

Ptyhion in Informatics, Grade: 7.72/10, “Very Good”  
Specialization: Information Systems  
Dissertation topic: “Transformation of Rules Written in SWRL (Semantic Web Rule Language) to Rules Written in CLIPS-COOL”. Supervisor: Prof. Nick Bassiliades.

## PUBLICATIONS

### PhD Thesis

1. **E. Rigas**, “Artificial Intelligence Methods for the Management of Electric Vehicles in the Smart Grid”, Aristotle University of Thessaloniki, 2018, <https://www.didaktorika.gr/eadd/handle/10442/44843>

### Articles in Journals

1. A. Koufakis, **E. Rigas**, N. Bassiliades, S. Ramchurn, “Offline and Online Electric Vehicle Charging Scheduling with V2V Energy Transfer”, IEEE Transactions on Intelligent Transportation Systems, 2019, doi: 10.1109/TITS.2019.2914087
2. **E. Rigas**, S. Karapostolakis, N. Bassiliades, S. Ramchurn, “EVLlibSim: A Tool for the Simulation of Electric Vehicles’ Charging Stations Using the EVLib Library”, Simulation Modelling Practice and Theory, Elsevier, 2018, doi: <https://doi.org/10.1016/j.simpat.2018.06.007>
3. **E. Rigas**, S. Ramchurn, N. Bassiliades, “Algorithms for Electric Vehicle Scheduling in Large-Scale Mobility-on-Demand Schemes”, Artificial Intelligence, Elsevier, 2018, doi: <https://doi.org/10.1016/j.artint.2018.06.006>
4. **E. Rigas**, S. Ramchurn, N. Bassiliades, “Managing Electric Vehicles in the Smart Grid Using Artificial Intelligence: A Survey”, IEEE Transactions on Intelligent Transportation Systems, 2015, DOI: 10.1109/TITS.2014.2376873

### Papers in Conferences and Workshops

1. **E. Rigas**, C. Spyrou, M. Papoutsoglou, H. Proios, Semi-automatic Analysis of Spontaneous Speech in History Intake from Aphasia-related Stroke Patients to Rank and Categorize Fast Symptoms, E-

- Poster Discussion, European Stroke Journal 2019, Milan, Italy, 2019 DOI: 10.1177/2396987319845578
2. I. Gkourtzounis, **E. Rigas**, N. Bassiliades, "Towards Online Electric Vehicle Scheduling for Mobility-On-Demand Schemes", 16th European Conference on Multi-Agent Systems (EUMAS), Bergen, Norway, 2018
  3. A. Koufakis, **E. Rigas**, N. Bassiliades, S. Ramchurn "Towards an Optimal EV Charging Scheduling Scheme with V2G and V2V Energy Transfer", 6th IEEE International Conference on Smart Grid Communications (SmartGridComm 2016), IEEE, pp. 302-307 6-9 November 2016, Sydney, Australia. doi: 10.1109/SmartGridComm.2016.7778778
  4. S. Karapostolakis, **E. Rigas**, N. Bassiliades, S. Ramchurn, "EVLlib: A Library for the Management of the Electric Vehicles in the Smart Grid", 9th Hellenic Conference on Artificial Intelligence (SETN-16), 18-20 May 2016, Thessaloniki, Greece. doi: 10.1145/2903220.2903225
  5. A. Seitaridis, **E. Rigas**, N. Bassiliades, S. Ramchurn, "Towards an Agent-Based Negotiation Scheme for Scheduling Electric vehicle Charging", 13th European Conference on Multi-Agent Systems (EUMAS), Athens, Greece, 17-18 December 2015, doi=10.1007/978-3-319-33509-4\_14.
  6. **E. Rigas**, S. Ramchurn, N. Bassiliades, "Algorithms for Electric Vehicle Scheduling in Mobility-on-Demand Schemes", in Intelligent Transportation Systems (ITSC), 2015 IEEE 18th International Conference on , vol., no., pp.1339-1344, 15-18 Sept. 2015, doi: 10.1109/ITSC.2015.220
  7. T. Stavropoulos, **E. Rigas**, E. Kontopoulos, N. Bassiliades, I. Vlahavas, "A Multi-Agent Coordination Framework for Smart Building Energy Management", Proc. 3rd International Workshop on Artificial Intelligence Techniques for Power Systems and Energy Markets (IATEM) in conjunction with DEXA 2014, IEEE, Munich, Germany, September 1 – 4, 2014, 2014.
  8. **E. Rigas**, S. D. Ramchurn, N. Bassiliades, G. Koutitas, "Congestion management for urban EV charging systems," *IEEE International Conference on Smart Grid Communications (SmartGridComm)*, 2013, pp.121,126, 21-24 Oct. 2013 doi: 10.1109/SmartGridComm.2013.6687944
  9. **E. Rigas**, G. Meditskos, N. Bassiliades, "SWRL2COOL: Object-Oriented Transformation of SWRL in the CLIPS Production Rule Engine", *Artificial Intelligence: Theories and Applications, Lecture Notes in Computer Science*, vol. 7297, pp. 49-56, Springer Berlin / Heidelberg, 2012, Doi: 10.1007/978-3-642-30448-4\_7

## RESEARCH INTERESTS

Artificial intelligence, search algorithms, Mathematical Programming, Optimization, Intelligent Agents, Smart Grid, Electric Vehicles, Semantic Web, Ontologies.

## SCHOLARSHIPS AND AWARDS

- Scholarship for excellence awarded by the Aristotle University Research Committee (Academic year 2014-2015)
- The article entitled "Algorithms for Electric Vehicle Scheduling in Large-Scale Mobility-on-Demand Schemes" that was published at the "Artificial Intelligence Journal" was featured as an exceptional work through a news article that was published at the journal's website with aim to promote research with positive environmental-social impact.  
(<https://www.journals.elsevier.com/artificial-intelligence/news/getting-more-electric-cars-on-the-road>)
- Award from the Aristotle University for the previous achievement.
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## WORK EXPERIENCE

**February 2019 – November 2019**

**Hellenic Army, corps of Research and Informatics**  
Analyst, Programmer (As part of mandatory military service)

**March 2018 – June 2018**

**Cyprus Research and Innovation Center Ltd (CyRIC)**  
Researcher, data analyst  
Secondment as part of the ENCASE Marie Sklodowska – Curie research project

**November 2014 – November 2016**

**Catalogue of System & Software Properties**

**ESA AO/1-7785/14/NL/MH**  
Researcher, ontology engineer

**February 2014- February 2018**

**DEI College**  
Part-time lecturer for computer science courses

**December 2013- November 2014**

**Hellenic Academic Open Courses**  
Development of accessible online digital courses.  
NSRF (National Strategic Reference Framework) 2007–2013.

**September 2013- December 2013**

**Laboratories Technical Support**  
Department of Informatics,  
Aristotle University of Thessaloniki

## **LANGUAGES**

1. Greek, native language
2. English,
  - 2.1. IELTS, 7.5, December 2011
  - 2.2. Proficiency in English, University of Michigan, March 2003
3. German, Certificat Deutsch

## **OTHER**

1. Reviewer for the IEEE Intelligent Transportation Systems Transactions and Magazine, for the IEEE Transactions on Sustainable Computing and for several conferences and workshops.
2. Session chair at the 2015 IEEE ITS conference.
3. Organizing committee of the SETN Workshop on AI for the Smart Grid (AI4SG) co-located with the 9th Hellenic Conference on Artificial Intelligence (SETN-16).