

# 2015 IEEE Symposium on Evolving and Autonomous Learning Systems (IEEE EALS'15)

DECEMBER 7 TO 10, 2015 CAPE TOWN, SOUTH AFRICA

IEEE SSCI 2015 South Africa

The EALS 2015 Symposium will be a focal point for presentation of the recent advanced research results and industrial applications in the emerging area of evolving and autonomously learning systems. We live in the era of Big Data and by that they mean high volume, high variability, versatility, veracity data streams generated by Internet, sensors, organisations and the society. Learning autonomously from this ocean of data and extracting meaningful knowledge which is not fixed, but dynamically evolving is one of the key challenges that the research community and the post-industrial societies are facing now and will face in the near future. The Symposium has established a track record of high quality meetings of a relatively compact community of advanced researchers and practitioners and aims to keep and build upon this with the current event, EALS 2015.

## TOPICS:

### New Adaptive and Evolving Learning Methods:

Evolving in Dynamic Environments  
Drift and Shift in Data Streams  
Self-monitoring Evolving Systems  
Evolving Decision Systems / Evolving Perceptions  
Self-organising Systems / Evolving Neuro-fuzzy Systems  
Neural Networks with Evolving Structure  
Non-stationary Time Series Prediction with ES  
Automatic Novelty Detection in Evolving Systems  
Stability, Robustness, Unlearning Effects  
Structure Flexibility and Robustness in Evolving Systems  
Evolving Fuzzy Clustering Methods  
Evolving Fuzzy Rule-based Classifiers  
Evolving Intelligent Systems for Time Series Prediction  
Evolving Intelligent System State Monitoring and Prognostics  
Evolving Intelligent Controllers  
Evolving Fuzzy Decision Support Systems  
Evolving Consumer Behaviour Models

### Real-world application:

Robotics and Control Systems  
Industrial Applications  
Data Mining and Knowledge Discovery  
Intelligent Transport  
Bio-Informatics  
Defence

## Symposium Co-Chairs:

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## IMPORTANT DATES:

Paper Submission Due: June 14, 2015

Notification to authors: September 4, 2015

Final Submission: October 4, 2015

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