Contents

1 Classification and Forecasting of Physiological Data in Biological Systems
Till Aust 1

2 Machine Learning Supported Optimisation and Experimental Evaluation of Electrical Motors for Small Urban Passenger Vehicles
Diego Botache 14

3 Select Cartesian Genetic Programming!
Henning Cui 27

4 An Examination of Organic Computing Strategies in Design Optimization
Jens Decke 41

5 Communication Robustness in Cyber-Physical Energy Systems based on Controlled Self-Organization
Emilie Frost 55

6 Cross-Layer Optimisation in Deterministic Networks
Victor Gerling 70

7 Towards Self-Explaining Assistance Systems in Tomorrow's Factories
Michael Heider 84

8 Towards Adaptive Intelligent Packaging for Real-time Monitoring of Food Quality
Elia Henrichs 95

9 Scene Understanding at Manual Assembly Cells
Andreas Hubert 109

Bibliografische Informationen
https://d-nb.info/1324207523

digitalisiert durch DEUTSCHE NATIONAL BIBLIOTHEK

10 A deep learning approach for the classification of highly heterogeneous data in the context of treatment of medical emergencies
Md Faisal Kabir 121

11 Redundancy and Self-Healing - Towards an Organic Computing Automotive Environment
Timo Kisselbach 136

12 Towards a Predictive Maintenance Concept
Lukas Meitz 148

13 SCHNITZEL: SCHematizing Next-level Interpolation Targeting small siZe Exploration Learning
Wenzel Pilar von Pilchau 162

14 Increasing Efficiency of Deep Learning based Weed Detection
Ahmet Oğuz Saltık 173

15 Deep Reinforcement Learning with a Classifier System
Connor Schönberner 188

16 Combining flood forecasts through reinforcement learning
Michel Spils 204

17 Reinforcement Learning: Application Areas with Research Potential
Marco Steinberger 216

18 Reducing the Need of Hand-crafted Labels for Agricultural Image Recognition: A Self-Supervised Learning Approach
Nils-Holger Kaul 229

19 Sensor Equivariance for Active Road User Safety
Hannes Reichert 241