



EUROPEAN INFORMATION TECHNOLOGIES CERTIFICATION INSTITUTE, ASBL.
Brussels, Belgium, European Union



CERTIFICATE

Ahmed Mahmoud Mohamed Mahmoud Elakpawy

Has successfully completed test requirements of
The European Information Technologies Certification Programme

EITC/AI/ARL Advanced Reinforced Learning

Certification Programme examination result:

 73.33%

Certification Programme description:

Introduction: introduction to reinforcement learning; Tradeoff between exploration and exploitation: exploration and exploitation; Markov decision processes: Markov decision processes and dynamic programming; Prediction and control: model-free prediction and control; Deep reinforcement learning: function approximation and deep reinforcement learning, policy gradients and actor critics, planning and models, advanced topics in deep reinforcement learning, deep reinforcement learning agents; Case studies: classic games case study, AlphaGo mastering Go, AlphaZero mastering chess, Shogi and Go, AlphaZero defeating Stockfish in chess, AlphaStar mastering StarCraft II

Certificate Programme version/revision: EITC/AI/ARLv1r1

Earned ECTS credits: 2



CERTIFICATE ID: EITC/AI/ARL/SLJ25005304

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programme and test results scan/click QR code or visit:
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