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

# CERTIFICATE

## Fratila Ionut

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

## EITC/AI/ARL Advanced Reinforced Learning

**Certification Programme examination result:** 60%

**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 StartCraft II

**Certificate Programme version/revision: EITC/AI/ARLv1r1**

CERTIFICATE ID: **EITC/AI/ARL/SLJ25004893**
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