



OIST

OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY GRADUATE UNIVERSITY  
沖縄科学技術大学院大学

# Self-Organization of Action Hierarchy and Inferring Latent States in Deep Reinforcement Learning with Stochastic Recurrent Neural Networks

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## Final Exam Abstract

**Name:** Han, Dongqi  
**Degree Conferral Date:** 2022/09/30  
**Thesis Title:** Self-Organization of Action Hierarchy and Inferring Latent States in Deep Reinforcement Learning with Stochastic Recurrent Neural Networks

### Exam Abstract:

Han, Dongqi submitted a thesis entitled "Self-Organization of Action Hierarchy and Inferring Latent States in Deep Reinforcement Learning with Stochastic Recurrent Neural Networks" written in English for consideration for the degree of PhD. An exam panel was duly formed, consisting of a Chair, who acts procedurally, and two independent external examiners, as per normal OIST policy (see NOTE\* below). Both examiners were cleared of possible conflicts of interest by the OIST Curriculum and Examinations Committee.

Prior to the oral exam, the submitted thesis was confirmed to be free of plagiarism and was read by the two external examiners. Reports separately submitted by the two examiners agreed that the thesis was suitable to proceed to the final oral exam.

After examination of the written thesis, an oral exam was conducted in English on 2022/02/08 at the OIST Graduate School. After a public presentation lasting approximately one hour, the student was admitted to a closed oral exam before the exam panel, of up to two hours duration. The student successfully defended the thesis and responded to the questions from the exam panel.

Upon the recommendation from the Exam panel, the Curriculum and Examinations Committee confirmed the student had satisfied all requirements for the degree, and the degree of Doctor of Philosophy from Okinawa Institute of Science and Technology was awarded on 2022/09/30.

\*Note: OIST Policy Rules and Procedures (extract)

#### 5.3.13.3 Appointment of the Thesis Examination Panel

After receiving the Notice of Intent to Submit a Thesis, the Curriculum and Examinations Committee (CEC) will appoint thesis examiners from within and outside the University, to form a Thesis Examination Panel, as follows:

- i. Two Examiners selected from two different working-countries, who are expert in the field of the proposed thesis and external to OIST. The CEC appoints the examiners taking into account nominations provided by the Thesis Supervisor. The CEC is responsible for determining if the nominated examiner is expert in the field of the proposed thesis research, taking into account the publications of the examiner in international peer reviewed journals.
- ii. A Chair selected from the OIST faculty members with knowledge OIST standards and regulations concerning PhD thesis examinations.

The Thesis Supervisor is responsible for ensuring that the nominated examiners meet the specified conditions. The Academic Services Section of the Graduate School is responsible for checking that the specified conditions are satisfied. If the conditions are not satisfied, the nomination shall not be submitted to the CEC, and the Supervisor shall be advised on the grounds for declining the examiner and asked to nominate a new examiner by the Academic Services Section.

The CEC may alternatively appoint an examiner who has not been nominated by the Supervisor.