Deyao Zhu

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Google Scholar: https://scholar.google.com/citations?user=dENNKrsAAAAJ

Research Interests

Robot Learning, Sequential Decision Making, Reinforcement Learning, Motion Forecasting, Video & Language Understanding.

Education

| King Abdullah University of Science and Technology PhD, Computer Science Topic in Reinforcement Learning and Motion Forecasting | Thuwal, Saudi Arabia 01/2020 – Now |
|---|--|
| Gottfried Wilhelm Leibniz Universität Hannover MSc, Electrical Engineering and Information Technology Coursework in Robotics and Machine Learning | Hanover, Germany 10/2016 – 04/2019 |
| Tongji University BEng, Mechatronics Coursework in Automation and Control Theory | Shanghai, P.R. China 09/2012 – 09/2016 |

Publications

- Deyao Zhu, Yuhui Wang, Jürgen Schmidhuber, Mohamed Elhoseiny. Guiding Online Reinforcement Learning with Action-Free Offline Pretraining. Preprint
- Deyao Zhu, Li Erran Li, Mohamed Elhoseiny. Value Memory Graph: A Graph-Structured World Model for Offline Reinforcement Learning. International Conference on Learning Representations (ICLR) 2023
- 3. Abduallah Mohamed, **Deyao Zhu**, Warren Vu, Mohamed Elhoseiny, Christian Claudel. Social-Implicit: Rethinking Trajectory Prediction Evaluation and The Effectiveness of Implicit Maximum Likelihood Estimation. European Conference on Computer Vision (ECCV) 2022
- 4. Jun Chen, Aniket Agarwal, Sherif Abdelkarim, **Deyao Zhu**, Mohamed Elhoseiny. **RelTransformer: A Transformer-Based Long-Tail Visual Relationship Recognition**.

 Conference on Computer Vision and Pattern Recognition (CVPR) 2022
- Deyao Zhu, Mohamed Zahran, Li Erran Li, Mohamed Elhoseiny. Motion Forecasting with Unlikelihood Training in Continuous Space. Conference on Robot Learning (CoRL) 2021 (oral 6.5%)
- Deyao Zhu, Mohamed Zahran, Li Erran Li, Mohamed Elhoseiny. HalentNet: Multimodal Trajectory Forecasting with Hallucinative Intents. International Conference on Learning Representations (ICLR) 2021
- Deyao Zhu, Marco Munderloh, Bodo Rosenhahn, Jörg Stückler. Learning to Disentangle Latent Physical Factors for Video Prediction. German Conference on Pattern Recognition (GCPR) 2019

Work History

King Abdullah University of Science and TechnologyThuwal, Saudi Arabia
Teaching Assistant
01/2021 – Now

CS 283 Deep Generative Model & CS 326 Low Resource Deep Learning

Max Planck Institute for Intelligent SystemsTübingen, GermanyMaster Thesis Student09/2018 - 04/2019

Focused on video prediction and physics scene understanding

Bosch Center for Artificial IntelligenceRenningen, Germany

Internship
03/2018 – 08/2018

Focused on policy gradient methods in autonomous driving

Institut für Informationsverarbeitung, Uni HannoverHanover, GermanyResearch Assistant06/2017 – 02/2018

Focused on human pose estimation

Skills

Programming: PyTorch, TensorFlow, Python, Matlab, ROS, C++

Languages: English: Fluent German: Basic Hokkien: Native Mandarin: Native

Others

Third place in Habitat Rearrangement Challenge 2022 Reviewer in TPAMI, CoRL 2022, ECCV 2022, AAAI 2023, and CVPR 2023