

## EDUCATION

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### The University of Edinburgh

*Ph.D. in Machine Learning and Computer Vision*

*Edinburgh, UK*

*2018–2022*

- Thesis Title: Generative Factorization For Object-Centric Representation Learning
- Supervisors: Prof. Robert B. Fisher (principal) and Prof. Chris Williams (second)

### The University of Edinburgh

*M.Sc. in Artificial Intelligence (**with Distinction**)*

*Edinburgh, UK*

*2016–2017*

### Wuhan University of Technology

*B.Eng. in Automation Engineering (**Outstanding Engineer**)*

*Wuhan, China*

*2012–2016*

## SCHOLARSHIPS AND AWARDS

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### School of Informatics Scholarship

*School of Informatics, The University of Edinburgh*

*Edinburgh, UK*

*2018*

## EXPERIENCE

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### *Research Intern*

Facebook Reality Labs

*Zurich, Switzerland*

*Fall 2021*

### *Research Intern*

NEC Laboratories America. Inc

*San Jose, USA*

*Summer 2021*

## PUBLICATIONS

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1. Align-Deform-Subtract: An Interventional Framework for Explaining Object Differences  
Cian Eastwood<sup>1†</sup>, **Li Nanbo**<sup>1†</sup>, CKI Williams  
*International Conference on Learning Representations (ICLR) Workshop: Objects, Structure and Causality*, 2022
2. Object-Centric Representation Learning with Generative Spatial-Temporal Factorization  
**Li Nanbo**, Muhammad Ahmed Raza, Hu Wenbin, Zhaole Sun, Robert B. Fisher  
*Advances in Neural Information Processing Systems (NeurIPS)*, 2021
3. Learning Object-Centric Representations of Multi-Object Scenes from Multiple Views  
**Li Nanbo**, Cian Eastwood, Robert B. Fisher  
*Advances in Neural Information Processing Systems (NeurIPS)*, 2020 (**Spotlight, top 3%**)
4. Duplicate Latent Representation Suppression for Multi-object Variational Autoencoders  
**Li Nanbo**, Robert B. Fisher  
*The British Machine Vision Conference (BMVC)*, 2021
5. Hybrid Multi-Camera Visual Servoing to Moving Target  
Hanz Cuevas-Velasquez<sup>1†</sup>, **Nanbo Li**<sup>1†</sup>, Radim Tylecek, Marcelo Saval-Calvo, Robert B. Fisher  
*IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2018

6. DUGMA: Dynamic Uncertainty-Based Gaussian Mixture Alignment  
Can Pu, **Nanbo Li**, Radim Tylecek, Robert B. Fisher  
*International Conference on 3D Vision (3DV)*, 2018 (**Oral presentation**)
7. *SDF-MAN: Semi-Supervised Disparity Fusion with Multi-Scale Adversarial Networks*  
Can Pu, Runzi Song, Radim Tylecek, **Nanbo Li**, Robert B Fisher  
*Remote Sensing*, 2019