

Yanran Guan (管焱然)

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EDUCATION

- **Carleton University** Ottawa, ON, Canada
Ph.D. in Computer Science Sept. 2020 – Present
M.C.S. in Computer Science Sept. 2017 – Dec. 2019
- **Donghua University** Shanghai, China
B.E. in Computer Science and Technology Sept. 2013 – Jun. 2017
- **Shanghai International Studies University** Shanghai, China
B.A. (Minor) in French Language Sept. 2014 – Jun. 2017

EXPERIENCE

- **Carleton University** Ottawa, ON, Canada
Research Assistant Sept. 2017 – Present
Teaching Assistant Sept. 2018 – Present
- **Huawei Technologies Canada** Markham, ON, Canada
Associate Researcher Jan. 2021 – Dec. 2021
- **Carleton Immersive Media Studio** Ottawa, ON, Canada
Research Assistant Jan. 2020 – Aug. 2020
- **Canadian Food Inspection Agency** Ottawa, ON, Canada
Junior Data Scientist May 2018 – Dec. 2019
- **Nanjing University of Posts and Telecommunications** Nanjing, China
Mobile Developer July 2016

SERVICE

- **Invited Reviewer**
KSH Transactions on Internet and Information Systems 2020
ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games 2020
International Conference on Systems and Informatics 2019

TEACHING

- **Teaching Assistant**
COMP 3005A/B Database Management Systems Fall 2023, Fall 2020, Fall 2019
COMP 2404A Introduction to Software Engineering Summer 2023
COMP 4501A Advanced Facilities for Real-Time Games Winter 2022, Winter 2019
COMP 4102A Computer Vision Winter 2021
COMP 4003A Transaction Processing Systems Fall 2019
COMP 2406A Fundamentals of Web Applications Fall 2018

PUBLICATIONS

1. **Yanran Guan**, Andrei Chubarau, Ruby Rao, and Derek Nowrouzezahrai. Learning Neural Implicit Representations with Surface Signal Parameterizations. *Computers & Graphics*, 114:257–264, 2023.
arXiv preprint: [arXiv:2211.00519](https://arxiv.org/abs/2211.00519)
DOI: [10.1016/j.cag.2023.06.013](https://doi.org/10.1016/j.cag.2023.06.013)
2. **Yanran Guan**, Han Liu, Kun Liu, Kangxue Yin, Ruizhen Hu, Oliver van Kaick, Yan Zhang, Ersin Yumer, Nathan Carr, Radomir Mech, and Hao Zhang. FAME: 3D Shape Generation via Functionality-Aware Model Evolution. *IEEE Transactions on Visualization and Computer Graphics*, 28(4):1758–1772, 2022.
arXiv preprint: [arXiv:2005.04464](https://arxiv.org/abs/2005.04464)
DOI: [10.1109/tvcg.2020.3029759](https://doi.org/10.1109/tvcg.2020.3029759)
3. Tansin Jahan*, **Yanran Guan***, and Oliver van Kaick. Semantics-Guided Latent Space Exploration for Shape Generation. *Computer Graphics Forum*, 40(2):115–126, 2021. (*co-first authors)
DOI: [10.1111/cgf.142619](https://doi.org/10.1111/cgf.142619)
4. **Yanran Guan**, Tansin Jahan, and Oliver van Kaick. Generalized Autoencoder for Volumetric Shape Generation. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshops*, pages 1082–1088, 2020.
DOI: [10.1109/cvprw50498.2020.00142](https://doi.org/10.1109/cvprw50498.2020.00142)
5. **Yanran Guan**. 3D Functionality Analysis for Shape Modeling via Partial Matching. Master’s thesis, Carleton University, 2019.
DOI: [10.22215/etd/2020-14050](https://doi.org/10.22215/etd/2020-14050)
6. Youqing Guan, Ke Zhang, and **Yanran Guan**. STCP: Simple Transaction Commit Protocol for Wireless Sensor Networks. In *Proceedings of the International Conference on Systems and Informatics*, pages 1022–1028, 2019.
DOI: [10.1109/icsai48974.2019.9010100](https://doi.org/10.1109/icsai48974.2019.9010100)
7. **Yanran Guan**, Oliver van Kaick, and Youqing Guan. Research and Implementation of Triangle Mesh Parameterization Method Based on Barycentric Mapping (in Chinese). *Journal of Beijing University of Posts and Telecommunications*, 42(5):83–90, 2019.
DOI: [10.13190/j.jbupt.2018-266](https://doi.org/10.13190/j.jbupt.2018-266)
8. **Yanran Guan** and Youqing Guan. Research and Application of Affine Transformation Based on OpenCV (in Chinese). *Computer Technology and Development*, 26(12):58–63, 2016.
DOI: [10.3969/j.issn.1673-629x.2016.12.013](https://doi.org/10.3969/j.issn.1673-629x.2016.12.013)

OTHER INTERESTS

- **Literature:** I was the co-translator of the [Chinese edition of *The Detour* \(*De omweg* in Dutch, and the English edition is known as *Ten White Geese*\)](#), novel by the Dutch novelist [Gerbrand Bakker](#) (translated from English to Chinese).
- **Chinese Calligraphy:** I am a member of the Jiangsu Young Calligraphers Association and the Nanjing Young Calligraphers Association.
- **Folk Music:** I am an amateur guitar enthusiast with a special interest in Eurasian folk music. Specifically, I play folk songs of Russia and Xinjiang, China.
- **Traveling:** I love traveling, especially long distance biking trips. I once biked over 1000 kilometers from Shanghai to Xiamen in China, and [here](#) is my blog post about this trip.