

# Wenjing Bian

- +49 160 388 7394
- wenjingbian1999@gmail.com
- <https://bianwenjing.github.io>
- <https://scholar.google.com/citations?user=IVfbqkgAAAAJ&hl=en>
- <https://github.com/bianwenjing>
- <https://www.linkedin.com/in/wenjing-b-02932714a>



I am a Postdoctoral Researcher in the **Autonomous Vision Group** at the University of Tübingen, working with **Prof. Andreas Geiger**. I received my DPhil in Engineering from the University of Oxford in 2025, where I was part of the **Active Vision Lab** under the supervision of **Prof. Victor Adrian Prisacariu** and **Prof. Andrea Vedaldi**. Prior to that, I completed my MEng at Oxford with First-Class Honours. My research focuses on reconstructing and understanding the 3D world from images and videos.

## Education

- 2020 – 2025 **DPhil, Engineering Science**, Active Vision Laboratory, University of Oxford.  
Research Interests: *3D Reconstruction, 3D Detection, Visual Localisation, 3D Diffusion*  
Supervisors: Prof. Victor Adrian Prisacariu, Prof. Andrea Vedaldi
- 2019 – 2020 **MEng, Engineering Science**, St. Anne's College, University of Oxford.  
Graduated with First Class Honours  
Supervisors: Prof. David Murray, Prof. Victor Adrian Prisacariu
- 2016 – 2019 **BA, Engineering Science**, St. Anne's College, University of Oxford.  
Graduated with First Class Honours  
Supervisors: Prof. David Murray, Prof. Budimir Rosic

## Work Experiences

- 10/2025 – present **Postdoctoral Researcher, University of Tübingen, Germany**
  - Work on 3D vision-related projects.
- 07/2024 – 03/2025 **R&D Intern. Niantic Labs, UK.**  
Project: *Scene Coordinate Regression with Diffusion Prior.*
  - Enhanced the relocalisation performance and reconstruction quality for scene coordinate regression with a diffusion-based geometric prior.
- 08/2023 – 01/2024 **Research Scientist Intern. Meta Reality Lab, US.**  
Project: *Diffusion Performance Improvement Network.*
  - Enabled the training pipeline for 3D object detection on a large-scale dataset.
  - Improved the performance of existing 3D object detection models by integrating diffusion techniques.

## Research Publications

### Conference Proceedings

- 1 Z. Wang<sup>1</sup>, **Wenjing Bian**<sup>1</sup>, X. Li<sup>1</sup>, *et al.*, "Seeing in the dark: Benchmarking egocentric 3d vision with the oxford day-and-night dataset," in *NeurIPS*, 2025. [URL: https://oxdan.active.vision/](https://oxdan.active.vision/).
- 2 **Wenjing Bian**, A. Barroso-Laguna, T. Cavallari, V. A. Prisacariu, and E. Brachmann, "Scene coordinate reconstruction priors," in *ICCV*, 2025. [URL: https://nianticspatial.github.io/scr-priors/](https://nianticspatial.github.io/scr-priors/).
- 3 **Wenjing Bian**, Z. Wang, and A. Vedaldi, "Catfree3d: Category-agnostic 3d object detection with diffusion," in *3DV (Oral)*, 2025. [URL: https://bianwenjing.github.io/CatFree3D](https://bianwenjing.github.io/CatFree3D).

- 4 J.-W. Bian, **Wenjing Bian**, V. A. Prisacariu, and P. H. Torr, "Porf: Pose residual field for accurate neural surface reconstruction," in *ICLR*, 2024. [URL: https://porf.active.vision](https://porf.active.vision).
- 5 Z. Wang, **Wenjing Bian**, and V. A. Prisacariu, "Crossscore: Towards multi-view image evaluation and scoring," in *ECCV*, 2024. [URL: https://crossscore.active.vision](https://crossscore.active.vision).
- 6 **Wenjing Bian**, Z. Wang, K. Li, J. Bian, and V. A. Prisacariu, "Nope-nerf: Optimising neural radiance field with no pose prior," in *CVPR (Highlight)*, 2023. [URL: https://nope-nerf.active.vision](https://nope-nerf.active.vision).
- 7 **Wenjing Bian**, Z. Wang, K. Li, and V. A. Prisacariu, "Ray-onet: Efficient 3d reconstruction from a single rgb image," in *BMVC*, 2021. [URL: https://rayonet.active.vision](https://rayonet.active.vision).

## Technical Skills

---

Programming & Tools    **📖** Python, PyTorch, MATLAB, JavaScript, HTML, CSS

Research Expertise    **📖** 3D Reconstruction, Diffusion Models, 3D Generation, 3D Detection

## Languages and Interests

---

Languages    **📖** English (fluent), Chinese (native), Japanese (conversational)

Personal Interests    **📖** Go (board game), Running, Table Tennis

## Peer Review

---

Conference    **📖** CVPR, ICCV, ECCV, BMVC, ICLR, ICML, NeurIPS, 3DV, EuroGraphics, SIGGRAPH Asia

Journal    **📖** IEEE TMM

## Awards and Prizes

---

- 2017    **📖 Gibbs Prize, University of Oxford.** Awarded for ranking among the top 2 students in the Department of Engineering Science in the final examination.
- 2016-2020    **📖 Awarded Scholarship, St. Anne's College, University of Oxford.** Awarded for academic excellence over the year.

## References

---

**Prof. Victor Adrian Prisacariu**  
University of Oxford  
victor@robots.ox.ac.uk

**Prof. Andreas Geiger**  
University of Tübingen  
a.geiger@uni-tuebingen.de