Saeed Razavi

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CS PhD student at ANU working on latent diffusion and flow models

Education

- **Australian National University** — Canberra, Australia
  Ph.D. in Computer Science — Advisor: Prof. Liang Zheng — *Mar 2026 – 2030*
- **Sharif University of Technology** — Tehran, Iran
  B.Sc. in Electrical Engineering — GPA: 18.23/20 — *Sep 2019 – Jun 2024*

Interests

- Diffusion and Flow-Based Generative Models
- Representation Learning and Conditioning for Image Synthesis
- Training and Sampling Efficiency in Latent Generative Models

PUBLICATIONS & PREPRINTS

- Representation Conditioning for Generation (RECON) — **arXiv-2026 (Preprint)**
  Authors: Razavi, S., Leng, X., & Zheng, L. [arXiv] [Project page] [Code]
  We propose RECON, a simple way to give the later layers of a diffusion transformer direct access to semantic features from a pretrained vision encoder. At inference, the model's own projection head stands in for the encoder, so RECON adds no extra parameters while making training converge much faster.

- Navigating the MIL Trade-Off: Flexible Pooling for Whole-Slide Image Classification — **NeurIPS-2025 (Accepted)**
  Authors: Jafarinia, H., Hamdi, D., ..., **Razavi, S.**, Najafi, A., & Rohban, M. H.
  We show that pooling in multiple-instance learning trades off stability against sensitivity, and propose Maxsoft, a pooling function that lets us control this trade-off for each task. Together with a simple augmentation for robustness, it gives strong whole-slide image classification even with little data.

- Snuffy: Efficient Whole Slide Image Classifier — **ECCV-2024 (Accepted)**
  Authors: Jafarinia, H., Alipanah, A., **Razavi, S.**, Mirzaie, N., & Rohban, M. H.
  We propose Snuffy, an efficient sparse transformer for classifying whole-slide pathology images, and prove that despite its sparsity it remains a universal approximator. It achieves strong results while staying cheap to train.

Research Internship

- **TUM (Technical University of Munich)** — Munich, Germany (Remote)
  Research Intern — Supervision: Prof. Nassir Navab — *Apr. 2024 - Jan. 2025*
  - Research Objectives: We present a novel **Concept-aware Contrastive Prototypical** approach to utilize the predefined concepts in an image as a prior. To this end, we propose **three levels of concepts based on the granularity of the available data.** Additionally, we propose a **concept contrastive prototypical objective function** to better align the extracted features of different concepts within each class and across other classes

Skills Summary

- **Engineering**: PyTorch, distributed training (DDP/FSDP), HuggingFace `diffusers` & `accelerate`, Weights & Biases, Python (NumPy, SciPy, sklearn, skimage, Pandas, Matplotlib), C/C++
- **Language Skills**: Persian (native), English (TOEFL): 104/120 (R: 30, L: 28, S: 23, W: 23)