

# AINAZ EFTEKHAR

✉ [ainazeft@cs.washington.edu](mailto:ainazeft@cs.washington.edu)    🏠 [ainaz99.github.io](https://ainaz99.github.io)

## EDUCATION

<b>University of Washington (UW)</b> Ph.D. in Computer Science and Engineering • GPA: 3.8/4.0, Advisor: Prof. Ali Farhadi and Prof. Ranjay Krishna.	Seattle, WA 09/2022 - present
<b>Ecole Polytechnique Federale de Lausanne (EPFL)</b> Visiting Student Researcher in VILAB • Advisor: Prof. Amir Zamir	Lausanne, Switzerland 09/2021 - 08/2022
<b>Sharif University of Technology</b> B.S. in Computer Engineering • GPA: 19.22/20	Tehran, Iran 09/2017 - 08/2022

## PUBLICATIONS

<b>The One RING: a Robotic Indoor Navigation Generalist</b> <i>Ainaz Eftekhara, Luca Weihs, Rose Hendrix, Ege Caglar, Jordi Salvador, Alvaro Herrasti, Winson Han, Eli VanderBil, Aniruddha Kembhavi, Ali Farhadi, Ranjay Krishna, Kiana Ehsani, Kuo-Hao Zeng.</i>	(Under Submission)
<b>Selective Visual Representations Improve Convergence and Generalization for Embodied-AI</b> <i>Ainaz Eftekhara*, Kuo-Hao Zeng*, Jiafei Duan, Ali Farhadi, Ani Kembhavi, Ranjay Krishna.</i>	<u>ICLR 2024 (Spotlight)</u>
<b>Omnidata: A Scalable Pipeline for Making Multi-Task Mid-Level Vision Datasets from 3D Scans</b> <i>Ainaz Eftekhara*, Alexander Sax*, Jitendra Malik, Amir Zamir.</i>	<u>ICCV 2021</u>
<b>Puzzle-AE: Novelty Detection in Images through Solving Puzzles</b> <i>Mohammadreza Salehi, Ainaz Eftekhara*, Niousha Sadjadi*, Mohammad Hossein Rohban, Hamid R. Rabiee</i>	Arxiv, 2020

## WORK EXPERIENCE

<b>Allen Institute for Artificial Intelligence (AI2)</b> <i>Research Intern, Supervisors: Kuo-Hao Zeng, Kiana Ehsani</i>	Seattle, WA 06/2024 – present
• [Team] Perceptual Reasoning and Interaction Research (PRIOR) • [Project] The One RING: a Robotic Indoor Navigation Generalist ( <i>submitted to CVPR 2025</i> ): An embodiment-agnostic policy, trained solely in simulation with diverse randomly initialized embodiments at scale, with robust performance on various real unseen robot platforms	
<b>Allen Institute for Artificial Intelligence (AI2)</b> <i>Research Intern, Supervisors: Ani Kembhavi, Ranjay Krishna</i>	Seattle, WA 06/2023 – 09/2023
• [Team] Perceptual Reasoning and Interaction Research (PRIOR) • [Project] Selective Visual Representations for Embodied-AI ( <i>accepted at ICLR 2024</i> ): a parameter-efficient approach to selectively filter visual stimuli for Embodied-AI tasks (inspired by selective attention in humans)	
<b>Ecole Polytechnique Federale de Lausanne (EPFL)</b> <i>Research Intern, Supervisor: Amir Zamir</i>	Lausanne, Switzerland 09/2020 – 08/2022
• Visual Intelligence and Learning Lab (VILAB) • [Project] Omnidata: A Pipeline for Making Multi-Task Mid-Level Vision Datasets ( <i>accepted at ICCV 2021</i> ): a pipeline to generate “steerable” multi-task vision datasets by parametrically sampling and rendering 3D scans, providing a pathway to explore various data sampling effects and create better vision datasets.	
<b>Sharif University of Technology</b> <i>Research Assistant, Mohammad Hossein Rohban</i>	Tehran, Iran 09/2019 – 09/2020
• [Project] Self-Supervised Approaches for Anomaly/Novelty Detection in Images and Videos	

**Indian Institute of Technology (IIT)**Research Intern, Supervisors: *Abir Das, Pabitra Mitra*

Kharagpur, India

07/2019-09/2019

- [Project] Reducing effects of severe dataset imbalance using an end-to-end CycleGAN-Classifier architecture

**HONORS AND AWARDS**

<b>UW + Amazon Science Hub Fellowship,</b>	2024
<b>EPFL Summer Research Fellowship,</b> Ecole polytechnique federale de Lausanne	2021
<b>Top 5% Academic Ranking,</b> Sharif University of Technology	2020
<b>Ranked 92<sup>th</sup></b> in Iranian Nationwide University Entrance Exam (Among +300,000),	2017
<b>Bronze Medal,</b> Iranian National Math Olympiad	2015, 1016
<b>Gold Medal in the 9th International Mathematics Contest,</b> IMC (Singapore) [certificate]	2013

**TEACHING EXPERIENCE**

<b>University of Washington</b>	
<i>Deep Learning</i>	Winter 2024
<b>Sharif University of Technology</b>	
<i>Artificial Intelligence, Discrete Structures, Data Structures and Algorithms, Advanced Programming</i>	2018-2020

**SKILLS**

**Programming:** Python, Java, C/C++, LaTeX  
**Machine Learning Tools:** PyTorch, OpenCV, scikit-learn, NumPy, pandas, matplotlib  
**Distribution and Deployment Tools:** Kubernetes, Docker, Github's CI/CD  
**Languages:** Persian (native), English (advanced, TOEFL score:109), French (Basic)

**RELEVANT COURSEWORK**

<b>University of Washington</b>	
• <i>Deep Robotic Learning (CSE 599 G), Deep Learning (CSE 493G1), Computational Neuroscience (CSE 528 A)</i>	
<b>Sharif University of Technology</b>	
• <i>Digital Image Processing (graduate), Artificial Intelligence, Machine Learning, Signals and Systems, Advanced Information Retrieval, Linear Algebra, Probability and Statistics, Design of Algorithms, Data Structures</i>	
<b>Online MOOCs</b>	
• <i>CS231n: Convolutional Neural Networks for Visual Recognition by Stanford, Deep Learning Specialization by deeplearning.ai, Machine Learning by Stanford-Online.</i>	
<b>Machine Vision and Learning Winter School</b>	
• <i>Brain Engineering Center and Cognitive Science School, IPM, Iran [certificate]</i>	

**ACADEMIC SERVICES**

<b>Reviewer of CVPR 2024/2025</b>	2024-2025
<i>Reviewing papers in Embodied-AI and Computer Vision</i>	
<b>Student Volunteer at ICCV 2023</b>	10/2023
<i>Helped with different logistic tasks at the conference [certificate]</i>	
<b>Member of Executive Team in Sharif Artificial Intelligence Challenge</b>	03/2018
<i>Sharif University of Technology</i>	
<b>Member of Executive Team in the ACM International Collegiate Programming Contest</b>	12/2017
<i>Sharif University of Technology</i>	