

Mohammad Reza Taesiri

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EDUCATION

University of Alberta, Edmonton, Alberta, Canada

- Ph.D. in Software Engineering and Intelligent Systems Sep 2021 – Present

Sharif University of Technology, Tehran, Tehran, Iran

- M.Sc. in Computer Software Engineering Sep 2015 – Sep 2017

Amirkabir University of Technology, Tehran, Tehran, Iran

- B.Sc. in Pure Mathematics Sep 2009 – Jun 2015

RESEARCH EXPERIENCE

La Forge, Ubisoft Montreal

- Research and Development Intern Aug 2022 – Dec 2022
 - Supervisor: Dr. Sarra Habchi
 - Focus: Robustness of Foundation Models, Image and Video Retrieval

ASGAARD Lab, University of Alberta

- Graduate Research Assistant Sep 2021 – Present
 - Supervisor: Prof. Cor-Paul Bezemer
 - Focus: Foundation Models for Video Games, Robustness

Nguyen Lab, Auburn University

- Guest Researcher Mar 2021 – Present
 - Supervisor: Prof. Anh Nguyen
 - Focus: Robust and Explainable Machine Learning

PUBLICATIONS

CONFERENCES

- [1] Giang Nguyen*, [Mohammad Reza Taesiri*](#) and Anh Nguyen (* Denotes Equal Contribution) – “Visual correspondence-based explanations improve AI robustness and human-AI team accuracy.” in *Thirty-sixth Annual Conference on Neural Information Processing Systems (NeurIPS 2022)*
- [2] Finlay Macklon, [Mohammad Reza Taesiri](#), Markos Viggiano, Stefan Antoszko, Natalia Romanova, Dale Paas and Cor-Paul Bezemer – “Automatically Detecting Visual Bugs in HTML5 <canvas> Games.” in *International Conference on Automated Software Engineering (ASE 2022)*
- [3] [Mohammad Reza Taesiri](#), Finlay Macklon and Cor-Paul Bezemer – “CLIP meets GamePhysics: Towards bug identification in gameplay videos using zero-shot transfer learning.” in *The Mining Software Repositories conference (MSR 2022)*

PREPRINTS

- [4] [Mohammad Reza Taesiri](#), Finlay Macklon, Yihe Wang, Hengshuo Shen and Cor-Paul Bezemer – “Large Language Models are Pretty Good Zero-Shot Video Game Bug Detectors.” in *Arxiv Preprint*
- [5] MohammadAmin Fazli*, Ali Owfi* and [Mohammad Reza Taesiri*](#) (* Denotes Equal Contribution) – “Under the Skin of Foundation NFT Auctions.” in *Arxiv Preprint*

JOURNALS

- [6] [Mohammad Reza Taesiri](#), Moslem Habibi and MohammadAmin Fazli – “A Video Game Testing Method Utilizing Deep Learning” in *Journal on Computer Science and Engineering (JCSE 2021)*

AWARDS & SCHOLARSHIPS

- Charles E. Gavin Fellowship, Auburn University 2022
- Graduate Research Assistant, University of Alberta 2021
- Ranked 10th, National entrance exam in Software Engineering, Iran 2015
- Ranked 11th, National entrance exam in Algorithms and Theory of Computation, Iran 2015

PROJECTS & DEMOS & DATASETS	<p>Intelligent Image Captioner, Hugging Face Spaces <ul style="list-style-type: none"> ▪ Built an image captioner using Detic and chatGPT </p> <p>The Game Bug Description Dataset, Hugging Face Datasets <ul style="list-style-type: none"> ▪ A dataset of textual descriptions of video game bugs </p> <p>CLIP Meets GamePhysics, Hugging Face Spaces <ul style="list-style-type: none"> ▪ Built a CLIP-based video retrieval system for video games. </p> <p>The GamePhysics Dataset, Hugging Face Datasets <ul style="list-style-type: none"> ▪ A dataset of video game bugs </p>	<p>Dec 2022</p> <p>Aug 2022</p> <p>Mar 2022</p> <p>Jan 2022</p>
OTHER WORK EXPERIENCE	<p>3-Dish, Karaj, Tehran, Iran <ul style="list-style-type: none"> ▪ Co-Founder <ul style="list-style-type: none"> • Your favorite dish with the same look and taste but in the Metaverse. </p> <p>Fanafzar Sharif Game Studio, Tehran, Tehran, Iran <ul style="list-style-type: none"> ▪ Summer Intern, • Worked on in-game level editors for mobile devices and created a proof of concept in the Unity game engine. </p>	<p>2019 – 2021</p> <p>Jun 2014 – Sep 2014</p>
TEACHING EXPERIENCE	<p>Sharif University, Tehran, Tehran, Iran <ul style="list-style-type: none"> ▪ Head Teaching Assistant <ul style="list-style-type: none"> • Simulation Course, Taught by Prof. Fazli </p>	<p>Jan 2016 – Jun 2016</p>
CERTIFICATES & ONLINE COURSES	<ul style="list-style-type: none"> ▪ Deep Reinforcement Learning Nanodegree, Udacity ▪ Reinforcement Learning Specialization, Coursera, University of Alberta ▪ Computational Neuroscience, Coursera, University of Washington ▪ Deep Learning Specialization, Coursera, DeepLearning.AI ▪ Image and video processing, Coursera, Duke University ▪ Heterogeneous Parallel Programming, Coursera, University of Illinois Urbana-Champaign ▪ Programming Languages, University of Washington 	<p>2020</p> <p>2020</p> <p>2020</p> <p>2018</p> <p>2014</p> <p>2014</p> <p>2014</p>
SKILLS	<p>Machine Learning: PyTorch, Tensorflow, Tensorflow.js, Keras, Numpy, JAX Programming: Python, C#, Java, C/C++, Swift, Objective-C, Scheme, Racket, ML, CUDA Other Technologies: Docker and Kubernetes, Node, MongoDB, Neo4j, Wolfram Mathematica, Solidity Game Engines: Unity, Unreal Engine</p>	
HOBBIES	<p>Photogrammetry, Digital photography, Hiking</p>	
REFERENCES	<ul style="list-style-type: none"> ▪ Professor Anh Nguyen Assistant Professor, Auburn University Auburn, Alabama, USA anhnguyen@auburn.edu ▪ Professor Cor-Paul Bezemer Assistant Professor, University of Alberta Edmonton, Alberta, Canada bezemer@ualberta.ca ▪ Professor MohammadAmin Fazli Assistant Professor, Sharif University of Technology Tehran, Tehran, Iran fazli@sharif.edu 	

[CV compiled on 2022-12-30]