

Aref Tabatabaei

 (+98) 9134327684 |  arefmytb@gmail.com |  arefmytb.github.io |  ArefMYTB |  aref-tb

EDUCATION

Amirkabir University of Technology (Tehran Polytechnic)

Tehran, Iran

Bachelor of Science in Computer Engineering

Sep. 2019 - Jan. 2024

- Selected Courses:** Computational Intelligence | Applied Linear Algebra | Algorithm Design | Engineering Statistics | Robotics | Database Design

PUBLICATIONS

- Aref Tabatabaei, Zahra Dehghanian, Negar Movaghatian, and Maryam Amirmazlaghani. "NO MORE BLAH-BLAH: EMBRACING REAL TEXT IN THE IMAGE SYNTHESIS WORLD." In The Second Tiny Papers Track at ICLR 2024.

Preprints

- Aref Tabatabaei, Zahra Dehghanian, and Maryam Amirmazlaghani. "A Conditional Inpainting Approach For End-to-End Artifact Removal In VTON and Pose Transfer." Preprint, 2024.

RESEARCH & WORK EXPERIENCES

Hexan

Dec. 2024 - Current

Web Development

- Developed and maintained an admin panel for **truck management**, enabling real-time monitoring.

Sayal Sanjesh

Apr. 2024 - Current

Web Development

- Maintained and enhanced a website for a **water management** system, enabling smart meter control and real-time monitoring.

Amirkabir University of Technology (Polytechnic Iran)

Dec. 2022 - Jan. 2024

Undergraduate Research Assistant Under the Supervision of Prof. Maryam Amirmazlaghani | Statistical Machine Learning LAB

- Text Integration Into Image:** Led a project that seamlessly integrated text into images, resulting in a paper published in International Conference on Learning Representations (ICLR) Tiny Papers, where I served as the primary author.
- Artifact Removal:** Conducted research to remove artifacts in virtual try-on and pose transfer tasks, resulting in a paper with a preprint available on arXiv, for which I was the lead author.

Allostasis

May. 2022 - Dec. 2022

Computer Vision Developer

- Custom Avatars:** Developed personalized 3D avatars for clients by processing their images, creating tailored digital representations.
- Human Detection & Tracking System:** Designed and implemented a system using MediaPipe to detect and track human movements in real time.
- 3D Avatar Control:** Integrated live camera data with Godot Engine to enable dynamic, real-time control of 3D avatars, ensuring smooth interaction between users and their avatars.
- Full Pipeline Development:** Employed PyQt4, Docker, and Godot to build an end-to-end avatar creation system, streamlining the entire avatar-making process from image input to final interactive model.

LANGUAGES

English

IELTS Academic: Overall Band Score 7
(R7.5, L7.5, S6.5, W6.0)

Persian

Native proficiency

Japanese

Elementary proficiency

ASL

Basic proficiency

SKILLS

Programming Languages	Python, Golang, C/C++, JavaScript, HTML, CSS
Machine Learning Tools	PyTorch, Tensorflow, NumPy, OpenCV, Scikit-learn
Game Engine	Unity, GoDoT
Data management & Databases	MySQL, PostgreSQL, Redis
Graphical Design Tools	Adobe Premiere, Adobe After Effects
Frameworks & Programming Knowledge	Django, Fast API, React, PyQt, Docker, Arduino, ROS
Miscellaneous	Linux, LATEX, Microsoft Office, Git
Hobbies	Soccer, Chess, Hiking, Writing, Cooking

EVENTS EXPERIENCES

- **Linux Fest** at Amirkabir University of Technology *June 2022*
As a member of the Technical Staff
- **Game Craft** at Amirkabir University of Technology *April 2022*
As a member of the Technical Staff
- **AAISS** (AmirKabir AI Student Summer) *Jul, 2021 -- Aug, 2021*
As a member of the Technical Staff

NOTABLE PROJECTS

Web Design

Hexan & Sayal Sanjesh

- Design multiple websites and some web based projects using Django or Go as backend and React as frontend. [Github Link](#)

Artifact Removal

Preprints Available In ArXiv

- Official implementation of "A Conditional Inpainting Approach For End-to-End Artifact Removal In VTON and Pose Transfer". [Github Link](#)

Text Into Image

ICLR Tiny Paper 2024

- Official implementation of "NO MORE BLAH-BLAH: EMBRACING REAL TEXT IN THE IMAGE SYNTHESIS WORLD". [Github Link](#)

Robot Controller

Robotics Course, Prof. Javanmardi

- Controlled a robot using the ROS platform, employing PID controllers and image processing techniques. [Github Link](#)

Image Classification

Computational Intelligence Course, Prof. Ebad Zadeh

- Developed an image classification model using a neural network architecture from scratch. [Github Link](#)

Document Browser

Information Retrieval Course, Prof. Nick Abadi

- Designed and implemented a search engine tailored for textual documents. [Github Link](#)

AWARDS AND ACHIEVEMENTS

- **Alfond Scholars Initiative Scholarship** – Estimated Value: \$25,000, Northeastern University 2025
- **Best Bachelor of Science AI Thesis** – Amirkabir University, AAIC 2024
- **Winner, 800m Running** – Yazd Province Championship 2014
- **Second Place, 3000m Running** – Middle and South Region, Iran 2014
- **Multiple Medals in Soccer** – Yazd Province Competitions 2012 - 2017