

Amir Alimohammadi

✉ alimohammadiamirhossein@gmail.com

🌐 alimohammadiamirhossein.github.io

🐙 github.com/alimohammadiamirhossein

🌐 linkedin.com/in/alimohammadi-amirhossein

EDUCATION

- **Ph.D. in Computing Science** 2023 – Present
◦ Simon Fraser University (SFU), Vancouver, Canada GPA: 4.00/4.33 (3.70/4.00)
- **B.Sc. in Computer Engineering** 2018 – 2023
◦ Sharif University of Technology (SUT), Tehran, Iran GPA: 18.09/20 (3.84/4)

PUBLICATIONS

- **GIA: Geometry-aware Image Analogy** Will submit to ICLR 2027
◦ A. Alimohammadi*, B. Kariminia*, K. Izadpanah, Y. Chrysanthou, A. Mahdavi-Amiri
- **SIA: Selective Image Analogy** SIGGRAPH Asia 2026
◦ A. Alimohammadi*, K. Izadpanah*, B. Kariminia, Y. Chrysanthou, A. Mahdavi-Amiri
- **HairPort: Hair Import and Transfer from Single Images** SIGGRAPH 2026
◦ A. Heidari, A. Alimohammadi, W. Lira, X. Qin, A. Bar-Lev, A. Mahdavi-Amiri
- **Griffin: Generative Reference and Layout Guided Image Composition** Preprint (arXiv)
◦ A. Alimohammadi*, A. Mikaeili*, N. Hassanpour, A. Tagliasacchi, A. Mahdavi-Amiri
- **Cora: Correspondence-aware image editing using few step diffusion** SIGGRAPH 2025
◦ A. Alimohammadi*, A. Mikaeili*, S. Nag, N. Hassanpour, A. Tagliasacchi, A. Mahdavi-Amiri
- **SMITE: Segment Me In Time** ICLR 2025
◦ A. Alimohammadi, S. Nag, S. Asgari Taghanaki, A. Tagliasacchi, G. Hamarneh, A. Mahdavi-Amiri
- **Toward Reliable Human Pose Forecasting with Uncertainty** RA-L 2024
◦ S. Saadatnejad, A. Alimohammadi*, P. Saremi*, et al., T. Mordan, A. Alahi

* indicates equal contribution.

EXPERIENCE

- **Research Intern, Waabi, Toronto** May 2026 – Aug 2026
◦ Developing an action-conditioned world model for multi-view driving scenario generation
◦ Designing evaluation metrics for realism, consistency, and action controllability
◦ Correcting ISP artifacts and alignment errors in legacy training data
- **Research Assistant, Simon Fraser University** Sep 2023 – Present
◦ Supervised by Prof. Ali Mahdavi-Amiri
◦ Conducting research on generative models for image editing, image composition, video segmentation, and reference-guided generation
- **Research Intern, Sharif University of Technology** Oct 2022 – Aug 2023
◦ Supervised by Dr. Ehsaneddin Asgari and Dr. Mohammadjavad Faraji
◦ Studied cryptocurrency market trend prediction using machine learning models
- **Research Intern, VITA Lab, EPFL** Dec 2021 – Jul 2022
◦ Supervised by Prof. Alexandre Alahi and Dr. Saeed Saadatnejad
◦ Worked on uncertainty modeling for reliable 3D human pose forecasting

HONORS AND AWARDS

- 2017 **Gold** medalist at the 35th National Mathematical Olympiad
- 2016 **Silver** medalist at the International Mathematics Competition
- 2015 **Bronze** medalist at the International Mathematics Competition

PROJECTS

- **Intrinsic Diffusion** (Sep 2023 – Dec 2023): Developed a diffusion-based method for monocular depth estimation using intermediate latent features, achieving competitive depth prediction without model fine-tuning.
- **CryptoPredictions** (Oct 2022 – Aug 2023): Built an open-source cryptocurrency forecasting library with 9 models, 10 metrics, over 30 indicators, support for 15+ cryptocurrencies, and 250+ GitHub stars.
- **Unposed** (Dec 2021 – May 2022): Developed an open-source library for 3D human pose forecasting with standardized datasets, models, metrics, and benchmarking tools.