






SEYED AMIR KASAEI

Research Assistant, RIML Lab & MSc Student, Software Engineering, Sharif University of Technology

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EDUCATION

- **M.Sc. in Software Engineering** (Sep 2023 – Present)
Sharif University of Technology
GPA: 18.54/20 (4.0/4.0)
Focus: Computer Vision, Compositional Generation
- **B.Sc. in Computer Engineering** (Sep 2019 – Aug 2023)
University of Guilan
GPA: 19.58/20 (3.98/4.0)
Ranked 1st

RESEARCH INTERESTS

- Compositional and Multimodal Learning across Vision and Language
- Text-to-Image Generation and Diffusion Models
- Visual Reasoning and Semantic Alignment in Cross-Modal Systems

PUBLICATIONS

- **CARINOX: Inference-time Scaling with Category-Aware Reward-based Initial Noise Optimization and Exploration**
Seyed Amir Kasaei, Ali Aghayari, Arash Marioriyad, Niki Sepasian, Shayan Baghayi Nejad, MohammadAmin Fazli, Mahdieh Soleymani Baghshah, Mohammad Hossein Rohban
Under Review at TMLR
arxiv.org/abs/2509.17458
- **Evaluating the Evaluators: Metrics for Compositional Text-to-Image Generation**
Seyed Amir Kasaei, Ali Aghayari, Arash Marioriyad, Niki Sepasian, MohammadAmin Fazli, Mahdieh Soleymani Baghshah, Mohammad Hossein Rohban
NeurIPS 2025 Workshop GenProCC
arxiv.org/abs/2509.21227
- **Hallucination as an Upper Bound: A New Perspective on Text-to-Image Evaluation**
Seyed Amir Kasaei, Mohammad Hossein Rohban
NeurIPS 2025 Workshop GenProCC
arxiv.org/abs/2509.21257

HONORS & AWARDS

- **Exceptional Talent Admission**, Sharif University of Technology Sep 2023
Awarded direct admission to M.Sc. in Software Engineering as an exceptional talented student.
- **Ranked 1st**, B.Sc. Computer Engineering, University of Guilan 2019 – 2023
Highest GPA among all undergraduate Computer Engineering students.

EXPERIENCE

Research Assistantships

- *RIML Lab, Sharif University of Technology* Sep 2023 – Present
Supervisor: [Dr. Mohammad Hossein Rohban](#)
Focus: Compositional Generation and Multimodal Learning
- *University of Guilan* Sep 2022 – Aug 2023
Supervisor: [Dr. Seyed Abolghasem Mirroshandel](#)
Focus: Medical Image Analysis

Teaching Assistantships

- *Data Mining*, Sharif University of Technology Sep 2025 – Jan 2026
Instructor: [Dr. Mohammad Amin Fazli](#)
Assisted with assignments and projects
- *System 2 in AI*, Sharif University of Technology Feb 2025 – Jun 2025
Instructors: [Dr. Mohammad Hossein Rohban](#), [Dr. Mahdiah Soleymani Baghshah](#)
Assisted with course material preparation and quiz grading
Focus areas: Compositional Generation
- *Deep Learning*, Sharif University of Technology Feb 2025 – Jun 2025
Instructor: [Dr. Mahdiah Soleymani Baghshah](#)
Contributed to quiz and exam design, and grading
Focus areas: Generative Models
- *Intelligent Analysis of Biomedical Images*, Sharif University of Technology Sep 2024 – Jan 2025
Instructor: [Dr. Mohammad Hossein Rohban](#)
Supported exercises, exam and quiz design, and grading
Focus areas: Diffusion and Generative Models

Work Experience

- *IT Support Technician*, Guilan Soha Seir Sep 2019 – Sep 2023
Skills: Troubleshooting · Hardware · Software · Technical

LICENSES & CERTIFICATIONS

- **IELTS** - [Certificate](#)
IDP - Sep 2023
Overall: 6.5
Listening: 7, Reading: 6.5, Writing: 6, Speaking: 6

SKILLS

- **Machine Learning & Deep Learning:** Design and implementation of neural architectures using PyTorch, TensorFlow, and Keras; optimization techniques for training and evaluation
- **Computer Vision & Generative Models:** Expertise in diffusion models, text-to-image and image-to-text generation, multimodal learning
- **Natural Language Processing:** Representation learning, BERT-based models, text classification
- **Data Analysis & Visualization:** Proficient in statistical analysis and experimental evaluation with Python, NumPy, Pandas, Matplotlib, Seaborn, and Weights & Biases
- **Programming & Development:** Strong Python background; additional experience with Java, and basic web development
- **Collaboration & Tools:** GitHub, Slack, Discord for version control and research collaboration

REFERENCES

- | | |
|---|---|
| Dr. Mohammad Hossein Rohban
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| Dr. Mohammad Amin Fazli
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