# Abdollah Zakeri

🤳 720-205-8662 — 🐷 azakeri@uh.edu — 🛅 Abdollah Zakeri — 🕠 https://abdollahzakeri.github.io

**Summary** — Ph.D. in Computer Science with expertise in computer vision, deep learning, and robotics, backed by strong research, publications, and industry experience.

## Selected Skills

Languages Python, C++, Shell, MATLAB

Deep Learning PyTorch, TensorFlow, Lightning

Computer Vision OpenCV, YOLO, TorchVision, Detectron2

LLMs / GenAI Transformers, Tokenizers, LangChain, OpenAI

Multimodal Vision-Language Models, Prompt Engineering Deployment Docker, Conda, TensorRT, CUDA, Slurm, Git Data Science Pandas, Numpy, SQL, Matplotlib, Scikit-KLearn, XGBoost, LightGBM

# Experience

#### C3.AI - Data Science Intern

Redwood City, CA - May 2024 - Aug 2024

- Developed and deployed multi-modal vision network for C3.AI property appraisal R&D
- Developed and deployed a complete ML solution for C3.AI property appraisal product

## University of Houston - Graduate Research Assistant, Robotics & AI

Houston, TX - Aug 2022 - August 2025

- Led AI and vision system development for autonomous mushroom harvesting robot.
- Learning Disability (LD) risk assessment based on handwriting using multi-modal classification
- COVID severity detection for pediatric patients using CXR images and vision transformer

# Pencode Software (Founder) - Team Lead & AI Engineer

Iran - Jul 2016 - Aug 2022

- Delivered ML solutions for quality assessment (e.g., X-ray tire inspection using CNNs).
- Supervised multiple student teams; organized ACM ICPC training and contests at university level.

#### Education

# Ph.D. in Computer Science - GPA: 3.91

University of Houston - Aug 2022 - Present

- Research focus: computer vision, robotics, multimodal deep learning.

# M.S. in AI & Robotics Engineering - GPA: 3.91

Shahrood Univ. of Technology - Sep 2020 - Aug 2022

- Research focus: Deep learning, Computer Vision, Biometrics

B.S. in Software Engineering - GPA: 3.67

University of Birjand - Sep 2015 - Mar 2020

#### **Honors and Awards**

- 2nd place in Coogs-for-energy hackathon University of Houston
- 2nd place in C3.AI company-wide generative AI hackathon
- 1st place in 6th Birjand University Annual ACM/ICPC

## Certifications

- TensorFlow Developer DeepLearning.AI
- Generative Adversarial Networks Specialization DeepLearning.AI
- Deep Learning Specialization DeepLearning.AI

#### **Publications**

- Zakeri, A., et al. "SMS3D: 3D Synthetic Mushroom Scenes for Detection and Pose Estimation." Computers, 2025.
- Zakeri, A., et al. "M18K: Multi-Purpose Dataset for Mushroom Detection and Monitoring." Computers, 2025.
- Zakeri, A., Hedayati, R., et al. "Classification of Jujube Fruit Using Machine Learning." arXiv, 2021.
- Zakeri, A., Hassanpour, H. "WhisperNet: Deep Siamese Network for Lip-Based Biometrics." ICSPIS, IEEE, 2021.
- Zakeri, A., et al. "WhisperNetV2: SlowFast Siamese Network for Lip-Based Biometrics." arXiv, 2024.
- Nguyen, V.D., Zakeri, A., et al. "Tackling Domain Shifts in Person Re-Identification." CVPR, 2024.
- Koirala, B., Zakeri, A., et al. "Hybrid Three-Finger Gripper for Automated Mushroom Harvesting." Actuators, 2024.
- Koirala, B., Zakeri, A., et al. "Robotic Button Mushroom Harvesting: A Review." Applied Sciences, 2024.
- Koirala, B., Zakeri, A., et al. "Compact Hybrid Gripper for White Button Mushroom Harvesting," ASME IDETC-CIE, 2024.
- Hosseini, S.A., Zakeri, A., et al. "Enhanced CBIR Using LABP and Color Probabilities." Preprint, 2024.

## References

- Dr. Fatima Merchant fmerchant@uh.edu
- Dr. Driss Benhaddou dbenhaddou@uh.edu
- Dr. Shishir Shah sshah@uh.edu