Fardad Dadboud

AI/ML Researcher and Engineer

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EDUCATION

Ph.D. of Electrical Engineering and Computer Science (EECS), Jan 2021 – present
University of Ottawa Ottawa, Canada
Supervisor: Professor M. Bolic

M.Sc. of Biomedical Engineering-Bioelectric, *Sharif University of Technology* Sep 2015 – Jan 2018
Supervisor: Dr. M. Jahed Tehran, Iran

B.Sc. of Electrical Engineering, *Babol Noshirvani University of Technology* Sep 2010 – Sep 2015
Supervisor: Dr. A. Aghagolzadeh Babol, Iran

PROFESSIONAL EXPERIENCE

Senior Machine Learning Engineer (Internship), *Neptune Technologies* Feb 2025 – Jun 2025
Remote
- Developed AI-powered algorithmic trading strategies for trade signal generation
- Deployed real-time trading services as scalable online APIs
- Built multi-agent systems integrating LLMs and VLMs

Freelance AI Developer, *UpWork* Apr 2024 – Feb 2025
AI model development for different applications and real-world problems. Remote

Graduate Research Assistant, *University of Ottawa* Jan 2021 – present
Deep Learning and Computer Vision-related problems: Domain shift and adaptation, meta-learning. Application: Autonomous Vehicles Ottawa, Canada

Researcher, *National Research Council (NRC)* May 2021 – present
Object detection and tracking in videos for both real and simulated data Ottawa, Canada

PUBLICATIONS

DrIFT: Autonomous Drone Dataset with Integrated Real and Synthetic Data, Flexible Views, and Transformed Domains, 2024
Winter Conference on Applications of Computer Vision (WACV) 2025
Dadboud, Azad, Mehta, Bolic, Mantegh

Object Semantics Give Us the Depth We Need: Multi-task Approach to Aerial Depth Completion, 2023
The 2023 IEEE International Conference on Systems, Man, and Cybernetics (SMC 2023)
Hatami, Dadboud, Bolic, Mantegh, Najjaran

Single-Stage UAV Detection and Classification with YOLOV5: Mosaic Data Augmentation and PANet, *17th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS)* 2021
Dadboud, Patel, Mehta, Bolic, Mantegh

A machine learning model for predicting favorable outcome in severe traumatic brain injury patients after 6 months, *Acute and critical care* 2021
Nourelahi, Dadboud, Khalili, Niakan, Parsaei

AWARDS

The second place of Drone-vs-Bird Detection Challenge, 2021
4th WOSDETC of IEEE AVSS 2021

Research Scholarship, *University of Ottawa* 2021

Ranked 44th in National Entrance Exam for Master of Science 2015

SKILLS

🧰 **Software & IDEs**
Pycharm, VSCode, Cursor, VIM, Nano, Git, tmux

📡 **ML Ops & API Integration**
Neptune, DVC, DagsHub, MLflow, Weights & Biases, FastAPI, Nango, DocuRIO, REST APIs

🖥️ **Operating Systems & Shell**
Linux (Ubuntu), Windows, macOS, ROS, Bash

👩‍💻 **Programming Languages**
Python, MATLAB, C/C++, Java

🧪 **Simulation & Robotics**
AirSim, Gazebo, MATLAB

📝 **Documentation & Writing**
LaTeX/Overleaf, Microsoft Office

🧠 **DL/AI/CV Frameworks**
PyTorch, TensorFlow, OpenCV, YOLOv5/v7/v8, MMDetection, Detectron2, CVAT, SAM, CLIP, BLIP, Flamingo, LLAMA, Sonnet, AWS Bedrock, Together AI

🫁 **Deployment & Servers**
NGINX, Docker, SLURM, RunPod, Digital Research Alliance (Narval/Beluga), AWS, Azure, GCP