

# ARIYAN AZAMI

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## PROFESSIONAL SUMMARY

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Computer Engineering student at York University working at the intersection of AI/ML, full-stack development, and embedded systems. Software Developer at Appli Solutions (AI-powered hiring platform) with active ML research in medical imaging (PyTorch, U-Net, Stable Diffusion) and computer vision (YOLO, CVAT) — including an open-source dataset and trained model released on Kaggle and Hugging Face. Two-time national robotics champion with proven ability to ship full systems from firmware to UI.

## EDUCATION

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### YORK UNIVERSITY

B.Eng., Computer Engineering • Toronto, ON

Sep 2025 – Expected 2028

## PROFESSIONAL EXPERIENCE

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### APPLI SOLUTIONS

Software Developer • Toronto, ON

Jan 2026 – Present

- Develop and ship backend API endpoints and frontend interfaces for a production AI hiring platform that automates resume screening, candidate work trials, and behavioural evaluation for enterprise hiring teams.
- Integrate data flows between candidate-facing tools and backend AI evaluation models, supporting features that process large applicant pools and feed structured insights back to recruiters.
- Work across the full stack from database to UI; adapt rapidly to new tools, ship changes directly into production, and participate in feature iteration cycles typical of an early-stage product team.

### LABORATORY OF ADVANCED BIOTECHNOLOGIES — YORK UNIVERSITY

Machine Learning Research Assistant • Toronto, ON

Mar 2026 – Present

- Designed and trained U-Net segmentation models in PyTorch and TensorFlow to detect early-stage disease markers in diagnostic medical imaging data; tuned architectures and augmentation strategies to improve segmentation accuracy on limited clinical datasets.
- Built Python preprocessing and augmentation pipelines that standardize heterogeneous imaging inputs and automatically flag irregularities, reducing manual triage time for downstream review.
- Extending the pipeline with Stable Diffusion-based generative models to synthesize medical images, expand training sets, and improve model generalization on rare and underrepresented cases.

### SOUTHSHORE GASTROENTEROLOGY

Junior IT & Web Developer • Remote

Sep 2024 – Present

- Contribute to the development of southshoregastro.ca and evidence-based patient education tools that serve the clinic's patient base in a live production environment.
- Took initiative to source equipment and produce professional-grade educational video content; rapidly master new software stacks to support IT operations and infrastructure in a fast-paced clinical setting.

## RESEARCH & NOTABLE PROJECTS

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### REAL-TIME OBSTACLE DETECTION — COMPUTER VISION RESEARCH

Collaboration with Amirkabir University of Technology alumni

Jan 2026 – Present

- Curated and annotated a custom obstacle-detection dataset in CVAT spanning thousands of frames; defined class taxonomy and labelling conventions to maximize downstream model accuracy.
- Built an end-to-end YOLO training and inference pipeline in Python for real-time object detection in autonomous navigation contexts; tuned hyperparameters and augmentation strategies for production-grade performance.
- Published the open-source dataset and trained model on [Kaggle](#) and [Hugging Face](#); received positive community engagement and downloads.

**Custom Quadcopter Build — ArduPilot & DJI Flight Controller:** Designed and assembled a custom quadcopter from the ground up; configured ArduPilot firmware and integrated a DJI flight controller, tuning sensors, PID loops, and flight modes for stable autonomous operation.

**ATF Robotics Cup — 1st Place, National (5,000+ participants):** Led a 4-person team as Lead Software & Systems Engineer; wrote full C++ firmware on Arduino, designed custom PCBs in Altium Designer, and integrated real-time sensor feedback into the autonomous control stack.

**FIRA RoboWorldCup — 2nd Place, National | World Finals Qualifier:** Maintained 100% system uptime as Technical Operations Manager through embedded systems reliability work and live firmware troubleshooting under competition pressure.

**HEART York University — Web Developer (Volunteering):** Built and maintain the [club's website](#).

## TECHNICAL SKILLS

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**Machine Learning & AI:** PyTorch, TensorFlow, U-Net, Stable Diffusion, YOLO, CVAT, Hugging Face, model training and fine-tuning, dataset curation, transfer learning

**Programming & Tools:** Python, MATLAB, C++, Java, Git/GitHub, Linux, VS Code, Jupyter

**Full-Stack & Web:** Backend API development, frontend UI, HTML, CSS, JavaScript, REST integration, Git/version control

**Hardware & Embedded:** Arduino, Altium Designer (PCB), SolidWorks, Fusion 360, sensor integration, real-time control logic