

# Omid Karimpour

Product Lead | Project Lead | Robotist | Advisor

(+1) 647 447 5915 | info@omidkarimpour.ca | http://omidkarimpour.ca | okarimpour

## SKILLS

### Management

Communication  
Change Management  
Corporate Visibility  
P&L Management  
Crisis Management  
Agile Methodology  
Contract Negotiation

### Strategies

Vision Creation  
Partnering Strategies  
Outsource Strategies  
Product Strategies  
Go to Market Plan  
Budget Forecasting  
Growth Strategies

### Product

Customer Discovery  
Product Market Fit  
MVP Definition  
Business Analysis  
Risk Analysis  
Value Proposition  
Resource Allocation

## WORK EXPERIENCE

Present **Product Owner** at Advanced Intelligence Systems

- Responsible for all aspects of product management, product development, including **defining, developing, refining, manufacturing, launching and supporting** both hardware and software solutions
- Oversaw the **expansion of agile cross-functional teams** during rapid prototyping, growth and maturity cycles while maintaining a reusable and modular systems. Introduced multiple Autonomous Vehicles and Autonomous Mobile Robots
- Excelled team workflows by creating **processes**, roadmaps, documentation, and **introduced test-driven development**

**Robotics Engineer** at Advanced Intelligence Systems

- Developed and released features of **GUI, Robot Maneuverability, Teleoperation, Simulation and Development tools** on C++, Python, and JavaScript using ROS, React, Redux, Docker, Kubernetes, AWS Services, WebSocket, WebRTC

2020 **Adjunct Faculty** at Fleming College

**The Mechatronics Course Developer and Lead Instructor:** Lectures, labs, exams, and projects

- Hardware and Software Design: Used ARM based microcontroller, various sensors, actuators, PID controller, path planning
- Mentor to Student Applied Projects:** Utilized the Agile Project Management to bridge the gap between team and sponsor
- Mentored Team Invictus, an Innovation Award winner of the **Bell Innovation and Technology 2019 showcase**

2019 **Robotics Researcher** at NCART Lab

- Developed and implemented an Autonomous Mobile Robot performing an **indoor localization, SLAM, Navigation**
- Surveyed both LIDAR-based and vision-based SLAM systems such as Gmapping, Hector, Cartographer, and ORB SLAM
- Investigated various scenarios such as stair mapping, glass detection, and exploration problems

2018 **Manager & Lead Advisor** at SDI Marketing (TMS)

- Managed and oversaw the operations, incentivized, and trained District's stores, employees and lead advisors
- Multiple award winner for top sale performance
- Generated a **314% year-over-year growth**, over \$1M in Gross Margin

2015

## TEACHING EXPERIENCE

2020 **Fleming College Courses**  
**Adjunct Faculty**

Mechatronics 1  
Advanced Operating Systems  
Electronics  
Electrical  
Applied Project

2019 **Ryerson University Course**  
**Graduate Assistant**

Human-Robot Interaction

2018

## PROJECTS

### Personal

**UAV Navigation:** PX4, Pixhawk, ROS, Gazebo, Control, Mavros, Firmware  
**Path Planning:** BFS, DFS, Dijkstra, A\* and RRT  
**Overlay Image Project:** OpenCV, AWS and Continuous Integration and Deployment  
**Digit recognition:** Neural Network and prediction models simulated on MATLAB  
**Object Detection:** Hough transform algorithms with 5 pixels accuracy  
**High gain and low noise amplifier:** Design, simulation, and implementation  
**ProBee ZE10 Starter:** Designed and implemented using ARM Cortex M3

### Courses & Certificates

**Agile Product Owner Role: Techniques** by NASBA, IIBA, PMI  
**Business analysis for project managers** by PMI  
**Six Sigma Foundations** by PMI  
**B2B Marketing Foundations** by PMI  
**Control of Mobile Robots:** Behavioral Control of Mobile Robot  
**Neural Networks and Deep Learning:** L-Layer NN and Logistic Regression  
**Convolutional Neural Networks:** Build & apply a CNN, including recent variations

## EDUCATION

2019 Ryerson University

**M.Eng. Electrical and Computer Engineering**

Final Thesis: **Implementation of SLAM navigation obstacle avoidance and path planning of a robust mobile robot**

2016