January 24, 2020

Dr. Ali Dehghantanha
School of Computer Science
University of Guelph

Sent via email: adehghan@uoguelph.ca

Dear Dr. Dehghantanha,

RE: OFA support for the proposed "A Cyber Security Monitoring and Threat Hunting System for Protecting Smart and Precision Farming Systems" project

The Ontario Federation of Agriculture (OFA) is Canada's largest voluntary general farm organization, representing more than 38,000 farm family businesses across Ontario. These farm businesses form the backbone of a robust food system and rural communities with the potential to drive the Ontario and national economies forward.

The Ontario Federation of Agriculture is pleased to provide this letter of support for "A Cyber Security Monitoring and Threat Hunting System Monitoring and Threat Hunting System for Protecting Smart and Precision Farming Systems" project proposal.

Agriculture in Canada continues to undergo a dramatic revolution in large part due to the emergence of Precision Agri-Food Technologies and the Internet of Things (IoT). We are witnessing the further digitization of agriculture. As a result, there is unprecedented opportunity for the use of information and communication technologies (ICT) for improved fine-scale control of plants, animals, and the variability of natural and physical resources, with the goal of optimizing economic, social, and environmental farm performance.

Smart Farming and commercial services are available to farmers and stakeholders across the value chain, offering the potential for real-time decisions using data generated by on-farm sensors. However, a common theme emerging amongst farmers is concern for the safety and security of their farms and animals given the number of IoT devices used in their operations. The use of ICT and IoT devices are a potential point of access into farm operations from external threats. External access to on-farm technology could potentially result in catastrophic consequences; for example, external access to the environmental control systems of a livestock barn could result in inhumane animal environments or the devastating loss of farm animals.

With the interests of our farm members in mind, OFA supports the objectives of this project to:
- Assess the cyber security risks to smart farming environments;
- Assess the potential impact on Canada's agri-food value chain;
- Provide intelligence required to build a security monitoring and threat hunting system;
- Develop an incident detection and response framework for timely detection, containment and eradication of cyber intrusion attempts; and

- Develop network controllers and controlling devices that can be installed in a variety of locations in smart farming networks to collect and preserve data and to protect critical devices.

The insights and knowledge gained from this project will offer a significant and timely step towards the security of our farms and production systems.

We hope you are successful in receiving funding for this initiative.

Sincerely,

Keith Currie
President

cc: OFA Board of Directors