



## **CMC awarded Innovation for Defence Excellence and Security (IDEaS) contract to develop novel machine learning platform**

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CMC Microsystems has been awarded a contract for \$198,779 from the Department of Defence's Innovation for Defence Excellence and Security (IDEaS) Program to develop an artificial intelligence (AI) solution for monitoring and interpreting aerial surveillance video and imaging.

CMC will develop a reusable, scalable technology platform for machine-based learning that enables faster, more accurate detection and tracking by operators and analysts.

"The novel heterogeneous computing platform we offer to our academic research clients uniquely meets the resource- and compute-intensive needs of machine learning applications," says Gord Harling, President & CEO of CMC Microsystems. "Integrated with AI, it offers a significantly faster and more power-efficient solution that will outperform conventional visual processing tools."

A key advantage of the platform will be its reprogrammable hardware and software, says Dr. Yassine Hariri, Senior Engineer, Platform Design, at CMC. "Programmability makes the platform upgradable and adaptable to changing requirements and future technology advances, which reduces overall development and ownership costs."

Once demonstrated, the platform will be made available to the more than 60 postsecondary institutions CMC serves, as well as to industry, for further improvements and new features, and for training researchers. Three hundred professors across Canada's National Design Network®, managed by CMC, have research interests in defence and security.

The platform has potential for multiple domestic applications, from maritime/arctic monitoring to agriculture, transportation, and disaster management.

"We thank the Government of Canada for this opportunity and we look forward to demonstrating the benefits of this AI platform," says Mr. Harling.

### **Contact:**

Gord Harling  
President & CEO  
P: +1. 613. 449. 6820  
E: harling@cmc.ca

### **About IDEaS:**

The Innovation for Defence Excellence and Security (IDEaS) program fosters open innovation to provide creative thinkers with the structure and support to encourage solutions which will assist in solving some of Canada's toughest defence and security challenges.

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The IDEaS program is broken into several components, designed to advance defence technologies in Canada. Innovations are eligible for funding up to \$200,000 during Component 1a and up to \$1,000,000 during Component 1b. Innovations that are promising for Canada can receive non-IDEaS Program funding up to \$20M to continue development up to Solution Readiness Level 9.

[www.canada.ca/en/department-national-defence/programs/defence-ideas.html](http://www.canada.ca/en/department-national-defence/programs/defence-ideas.html)

**About CMC Microsystems:**

CMC Microsystems works with researchers and industry across Canada's National Design Network, providing access to world-class tools, technologies, expertise and industrial capabilities for designing, prototyping and manufacturing innovations in microsystems and nanotechnologies. CMC reduces barriers to technology adoption by creating and sharing platform technologies.

[www.cmc.ca](http://www.cmc.ca)

