SUCCESS WITH

COOPERATIVE RESEARCH AND DEVELOPMEMT AGREEMENT

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COMPANY NAME:
Florida Institute of Technology, Melbourne, FL

TECHNICAL PROJECT OFFICE:
AFTAC/SPX, Patrick AFB, FL

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AFTAC AGREEMENT

Aims to Improve Cloud Computing for Large Data Sets

The Air Force Technical Applications Center (AFTAC) and the Florida Institute of Technology (FIT) established a cooperative research and development agreement (CRADA) to explore efficient cloud computing for processing large data sets.

A CRADA is a government agreement allowing for research and development (R&D) collaborations between federal laboratories and nonfederal parties. CRADAs provide quick, unique access to extensive government-funded R&D resources that can be leveraged

Dr. Glenn Sjoden (left), chief scientist for the Air Force Technical Applications Center, shakes hands with Dr. T. Dwayne McCay, president and chief executive officer of Florida Institute of Technology, after the two organizations entered into a cooperative research and development agreement.
(U.S. Air Force Photo by Susan A. Romano)

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to yield powerful research results, while providing intellectual property protection as you move toward commercialization.

"By engaging the CRADA process, we hope to enable 'best value' solutions for the Air Force," said Dr. Glenn Sjoden, AFTAC's chief scientist.

REQUIREMENT

AFTAC requires the ability to process extremely large, unique data sets in an integrated computing environment. This CRADA provides a vehicle for sharing technical expertise, ideas, data and information in a protected environment that will focus on improving the capability to process large data sets associated with global nuclear treaty monitoring.

TECHNOLOGY TRANSFER

Cloud computing and big data analytics are becoming a key offering in government practices because it enhances the mission and reduces costs. Existing computer programs and algorithms developed for traditional computing may not be adequate to be efficiently and cost-effectively implemented in cloud computing solutions. As the Air Force modernizes its information technology architecture and leverages cloud computing, it must also evaluate the efficiency, effectiveness and compatibility of existing data processing and analyses techniques/algorithms with these new capabilities.

This CRADA will enable AFTAC to leverage FIT's academic faculty expertise in analysis methods and algorithms to address critical mission needs. The FIT team will use AFTAC facilities, expertise, and equipment with an estimated value of nearly $100M. This includes Air Force expertise in geophysics, nuclear physics and nuclear engineering, chemistry and electro-optical engineering.

"CRADAs are mutually beneficial to the Air Force and our partners. The Air Force benefits from the knowledge and skill sets of our partner while experiencing a cost savings in the cloud computing effort while the FIT team has access to Air Force expertise and state-of-the-art facilities and equipment," said Mr. Keith Quinn, Air Force Technology Transfer Program Manager.

PAYOFF

It is estimated that it would require four man-years to complete development of a cloud-computing capability. The Air Force estimates savings of more than $500,000 by establishing this agreement with a university team devoted to the effort.

U.S. AIR FORCE TECHNOLOGY TRANSFER PROGRAM OFFICE

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