

Biometric multi-modal fusion study

Request for Information

This Request for Information (RFI) is being issued on behalf of the Federal Bureau of Investigation's (FBI) Biometric Center of Excellence (BCOE) and is for the purpose of market research associated with the below description.

Description

The BCOE, headquartered in Clarksburg, West Virginia, is the FBI's focal point for biometrics and identity management. The BCOE is a collaborative initiative of the Laboratory Division, the Operational Technology Division (OTD), and the Criminal Justice Information Services (CJIS) Division. Together, scientists, technicians, and biometric experts from these divisions are supporting BCOE's mission to "foster collaboration, improve information sharing, and advance the adoption of optimal biometric and identity management solutions within the FBI and across the law enforcement and national security communities."

The BCOE is providing enhanced U.S. government services in the global quest to fight crime and terrorism with state-of-the-art biometrics technology. By drawing upon our knowledge and vast experience in fingerprint, DNA identification services, and supporting emerging and ongoing work in other modalities including face recognition, friction ridge, and tattoos.

The BCOE is seeking information from academia, industry, or law enforcement entities to any current research in biometric multi-modal fusion.

Multimodal biometric systems address several of the problems present in unimodal systems. Combining multiple sources of information, these systems improve matching performance, increase population coverage, deter spoofing, and facilitate indexing. There are various fusion levels and scenarios that are possible in multimodal systems.

Design:

Cost vs. performance
Verification vs. Identification
Choice and number of biometrics
Level of fusion
Fusion methodology
Assigning weights to biometrics
Multimodal databases

Capabilities

- *Are there studies or research that looked at:*
 - The statistical relationship between different modalities

- Determine the relative probability of various traits of each modality compared against other modalities
- The best methods for maximizing a positive identification by using any combination of modalities (i.e. face, tattoos, and friction ridge identifiers)
- Finding the minimum number of identification points in multiple modalities and still obtain positive identification

General

Any submission would include documenting quality requirements, design of the biometric collection device system.

Submitter should submit the following in electronic format in Microsoft Office (Word, Excel, PowerPoint) or PDF format. All information should be UNCLASSIFIED material only. Information should not exceed 20 one-sided 8 ½ x 11 pages, with one inch margins, and font no smaller than 12 point. Vendors are asked to submit specifications and drawings, but this is not required. E-mail verification will be sent upon receipt.

- A. A synopsis of the company's capabilities related to this RFI. Respondents must include the following information with their statement of capability:
 - 1) Company name, address, telephone number, a point of contact with e-mail address, Federal Cage Code, Data Universal Numbering System (DUNS) number, Central Contractor Registration (CCR) number, business size, and security clearance level.
 - 2) A list of contract vehicles that the Respondent Company has currently been awarded, i.e. GSA Schedule, SEWP IV, etc. Please provide contract numbers, period of performance dates, and contact information for the Contract Specialist.
- B. Information on government/commercial experience with respect to business intelligence software, developing strategy management tool suite, interface design capabilities, development methodology, testing capabilities, and operations and maintenance capabilities.
- C. Past Performance – Provide information regarding Offeror's experience providing implementation and support for a property system of a similar size and scope. Experience with government customers, especially the FBI, if preferred. Offerors are required to submit the following information as part of their RFI submission for two (2) current or recent contracts issued within the last five (5) years.
 - a) Name of customer
 - b) Name, telephone number, and email of the Contracting Specialist/Officer or Contracting Officer's Technical Representative (this individual should be the main point of contact who can answer questions pertaining to past performance)
 - c) Contract/Task Order number (and task order number if applicable)
 - d) Contract/Task Order type
 - e) Contract/Task Order value
 - f) Contract/Task Order period of performance
 - g) Brief description of services performed

All submissions should be e-mailed no later than 3:00 PM, August 23, 2012 to the Contracting Specialist, Carla D. Auvil at Carla.Auvil@ic.fbi.gov.

This RFI is for planning purposes only and shall not be considered as a request for proposal or as an obligation on the part of the Government to acquire any products or services. No entitlement to payment of direct or indirect costs or charges by the Government will arise as a result of contractor submission of responses to this RFI or the Government's use of such information. The Government reserves the right to reject, in whole or in part, any contractor's input resulting from this RFI. Responses to this RFI will not be returned. All questions regarding this RFI shall be in writing. No phone calls will be accepted.

The cost of responding to the RFI shall be exclusively borne by the organization submitting the information and no costs will be reimbursed by the government. The FBI makes no implied or in fact contract by issuing this RFI.

All clarifications, questions, and responses must be made via email. All questions regarding this RFI shall be in writing. No phone calls will be accepted. Phone messages will not be returned.