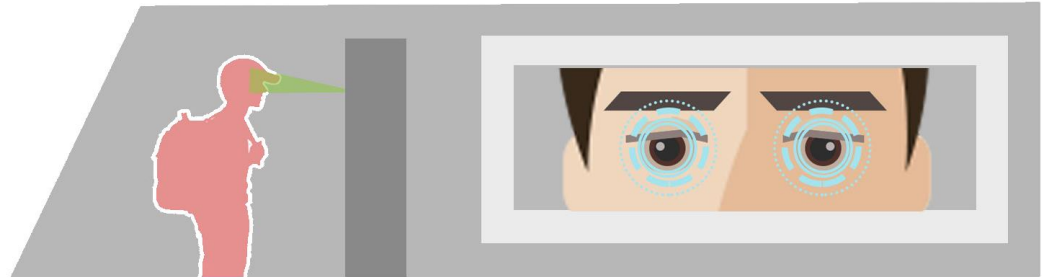
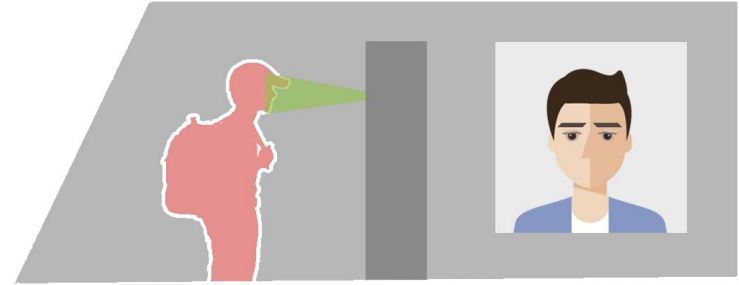


Image Analysis API

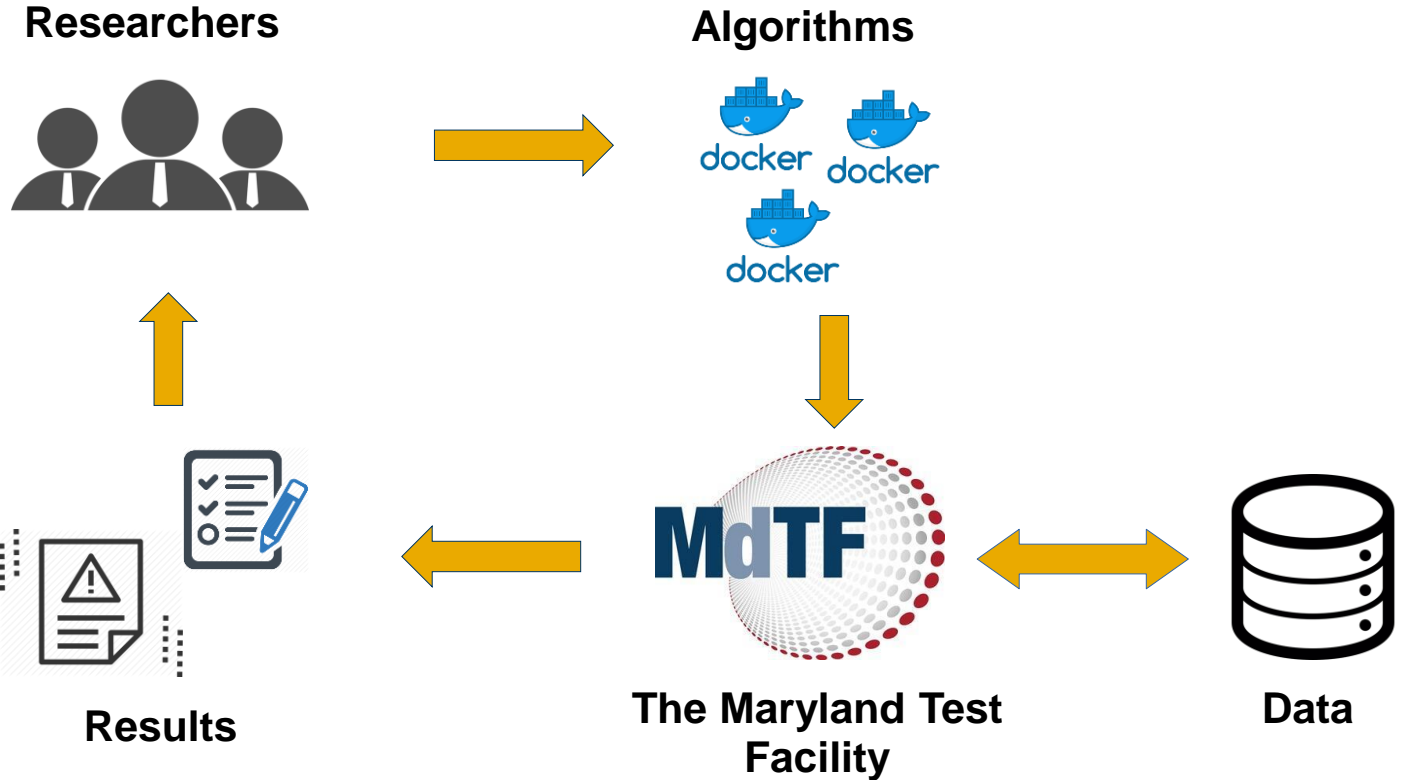
The Maryland Test Facility



MdTF Image Analysis API

- **Goals:**
 - Provides a uniform interface for MdTF // DHS S&T research partners to submit image analysis algorithms to the MdTF
 - Allows for rapid prototyping of research algorithms via the generic API
 - Keeps MdTF datasets sequestered

Overview



Implementation Details

- Algorithms must:
 - Be provided in a docker image
 - Implement and expose the specified API
 - Be submitted via the MdTF upload page
 - Identify a valid dataset for evaluation
 - Provide consistently formatted output from the `/v1/analyze-image` endpoint (i.e. always return the same JSON object format)
 - Handle parallel requests

Results Format

- **Results will:**
 - Be returned in a CSV format via automated email
 - One row per image submitted to the image analysis algorithm containing:
 - An image identifier
 - An error string (empty if no error is reported)
 - An additional column for each corresponding field reported by the `/v1/analyze-image` endpoint

Example

- **Output of a `/v1/analyze-image` call for three separate images:**

```
{  
  "AnalysisScore": 5.0002,  
  "NormalizedScore": 0.50002,  
  "ErrorLog": ""  
}
```

```
{  
  "AnalysisScore": 0,  
  "NormalizedScore": 0,  
  "ErrorLog": "No Face Found"  
}
```

```
"503: Service Unavailable"
```

- **Corresponding returned CSV, with headers:**

ImageID	ServerError	AnalysisScore	NormalizedScore	ErrorLog
17,	""	5.0002,	0.50002,	""
42,	""	0,	0,	"No Face Found"
73,	"503"	0,	0,	""

Questions?

- For a timely response, please use the community email address info@mdtf.org