

## PBI FIVeS Modifier and Portable Enrolment Station

Location of Assignment	Dhaka, Bangladesh
Client	Police Bureau of Investigation (PBI), Bangladesh Police
Reference Contact	Deputy Inspector General Email: sspa_f.pbi@police.gov.bd Phone: 02-9615721
Period of Activity	February 2023 to Present
Status	Completed
Nature of Work	The project scope includes a Face Matching Engine for PBI. The solution has live face detection capability and able to detect fake subjects and partially obstructed faces due to masks and other objects. The system is also able to detect various characteristics of the subjects' faces such as facial hair, glasses, and accessories, as well as characteristics like smiles, the state of the eyes, the state of the mouth, and more. Additionally, the system recognizes the roll of the head with 360 degrees and 15 degrees of head pitch. The system is developed on the .NET platform with the latest desktop and mobile technologies, and a web portal is developed with Angular, REST API, and more. The solution delivers results with minimal error and able to provide results in line with Ongoing FRVT 1:1 for matching faces. The system has User Management and Role-Based Access Control facilities to prevent unauthorized access. The system has multimodal Identification and Verification System using Fingerprint identification and Face Matching. The system also has Audit Trail and Log Management features and generates statistical reports for the convenience of administrators. The system hosts a module to verify data integrity and validity, and the enrolment kit have a licensing mechanism to prevent unauthorized access and destruction of integrity.
Total Man-Month	10

