
Face Recognition Grand Challenge

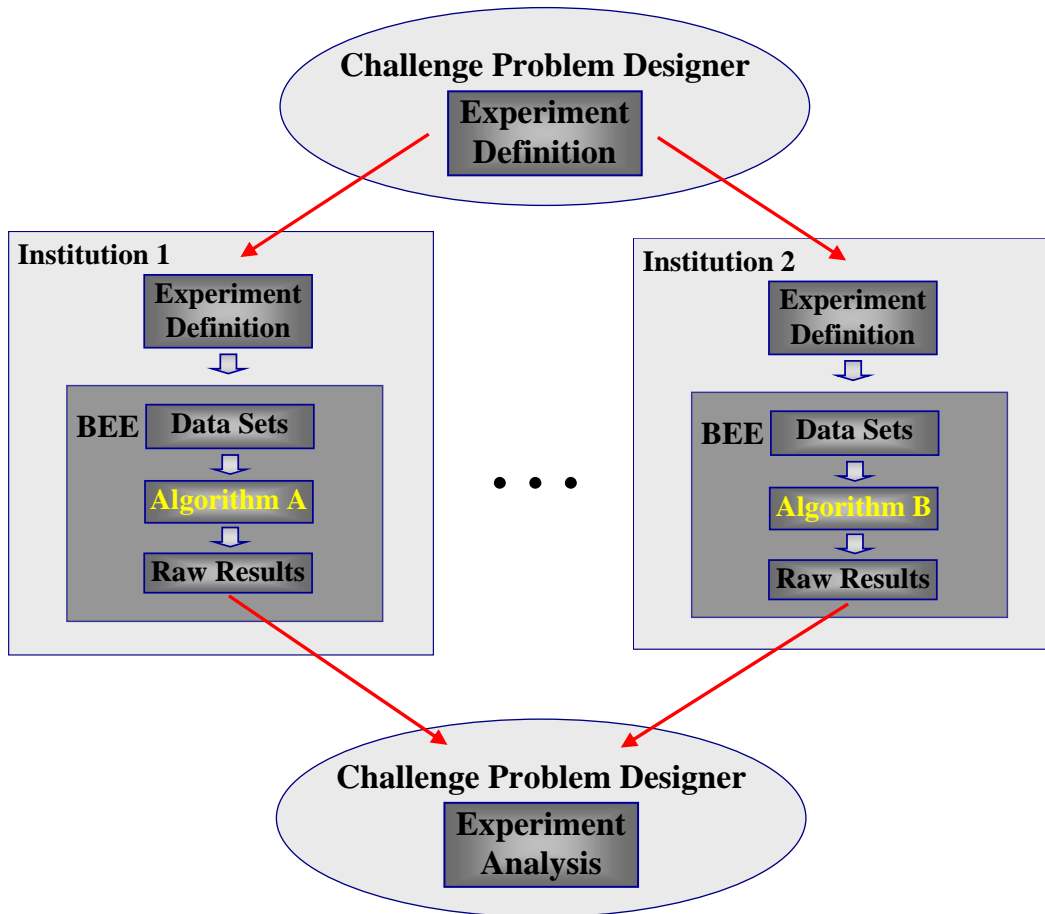
Dr. P. Jonathon Phillips
NIST

March 2004

Face Recognition Grand Challenge

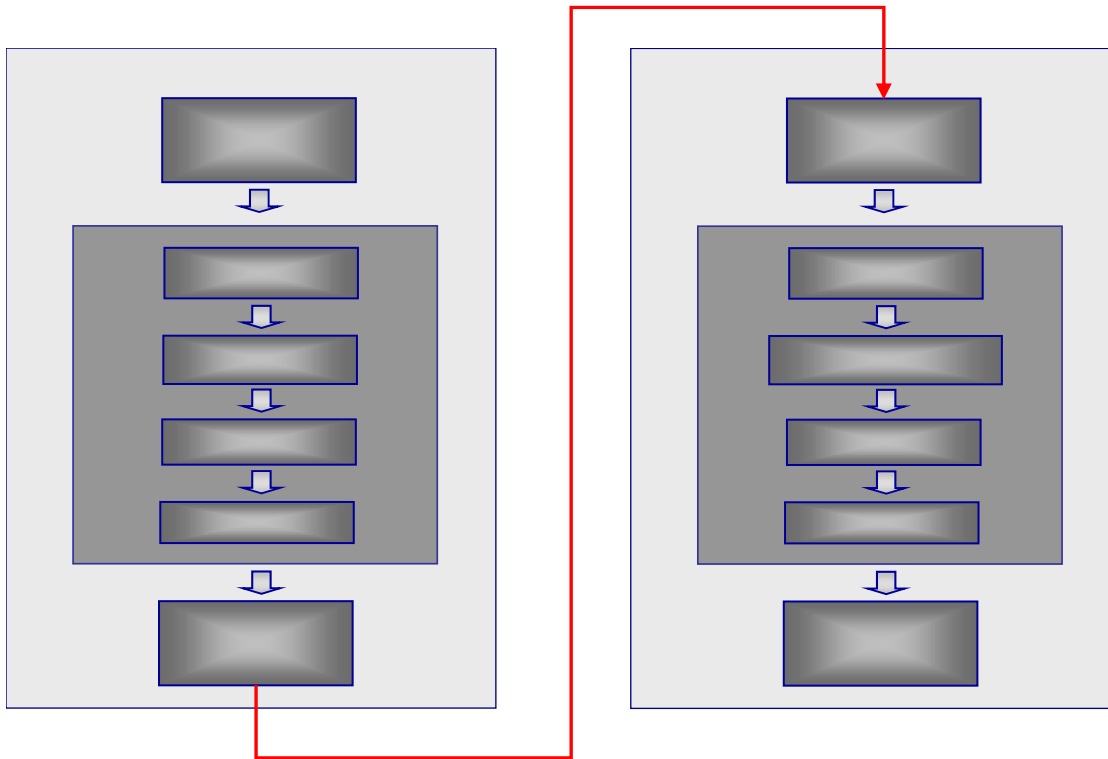
Systematically pursue two methods (2D and 3D) to reduce the error rate in face recognition by an order of magnitude.

Cross Institution Experimentation



- Execution of multiple algorithms at multiple institutions with a common experiment definition
- Transmission of raw results
- Uniform reporting of results
- Cross institutional analysis

Cross Institutional Experiment Replication



- Independent replication of results
- Transmission of experiment definitions
- Uniform reporting of results

Grand Challenge Evaluation Team

- **Jonathon Phillips—NIST**
 - Director Face Recognition Grand Challenge
- **Notre Dame (Prof. Kevin Bowyer and Prof. Patrick Flynn)**
 - Data collections
 - Baseline algorithms
- **SAIC (Dr. Todd Scruggs)**
 - Design and implement BEE
 - Maintain hBase
- **Mitre (Joe Marques)**
 - Analysis
 - Assist with Grand Challenge
- **University of Texas at Dallas (Prof. Alice O'Toole)**
 - Human performance

Conclusion

- **Face Recognition Grand Challenge**
 - Order of magnitude increase in performance
 - Systematically investigate still and 3D
 - Formulate series of challenge problems
 - Final Grand Challenge evaluation
- **Biometric Experimentation Environment (BEE)**
 - Infrastructure for Grand Challenge
 - Uniform structure for challenge problem