Welcome to the OpenHaRT 2013 Evaluation Workshop

Information Technology Laboratory

nist.gov/itl

Information Access Division

nist.gov/itl/iad

Mark Przybocki, Multimodal Information Group

nist.gov/itl/iad/mig

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Washington D.C. , Omni Shoreham hotel

The Multimodal Information Group's Project Areas

Speech

- Speech Recognition
- Dialog Management
- Topic Detection and Tracking
- Spoken Document Retrieval

Speaker & Language

- Speaker Recognition
- Human Assisted Speaker Recognition
- Speaker Segmentation
- Language Recognition
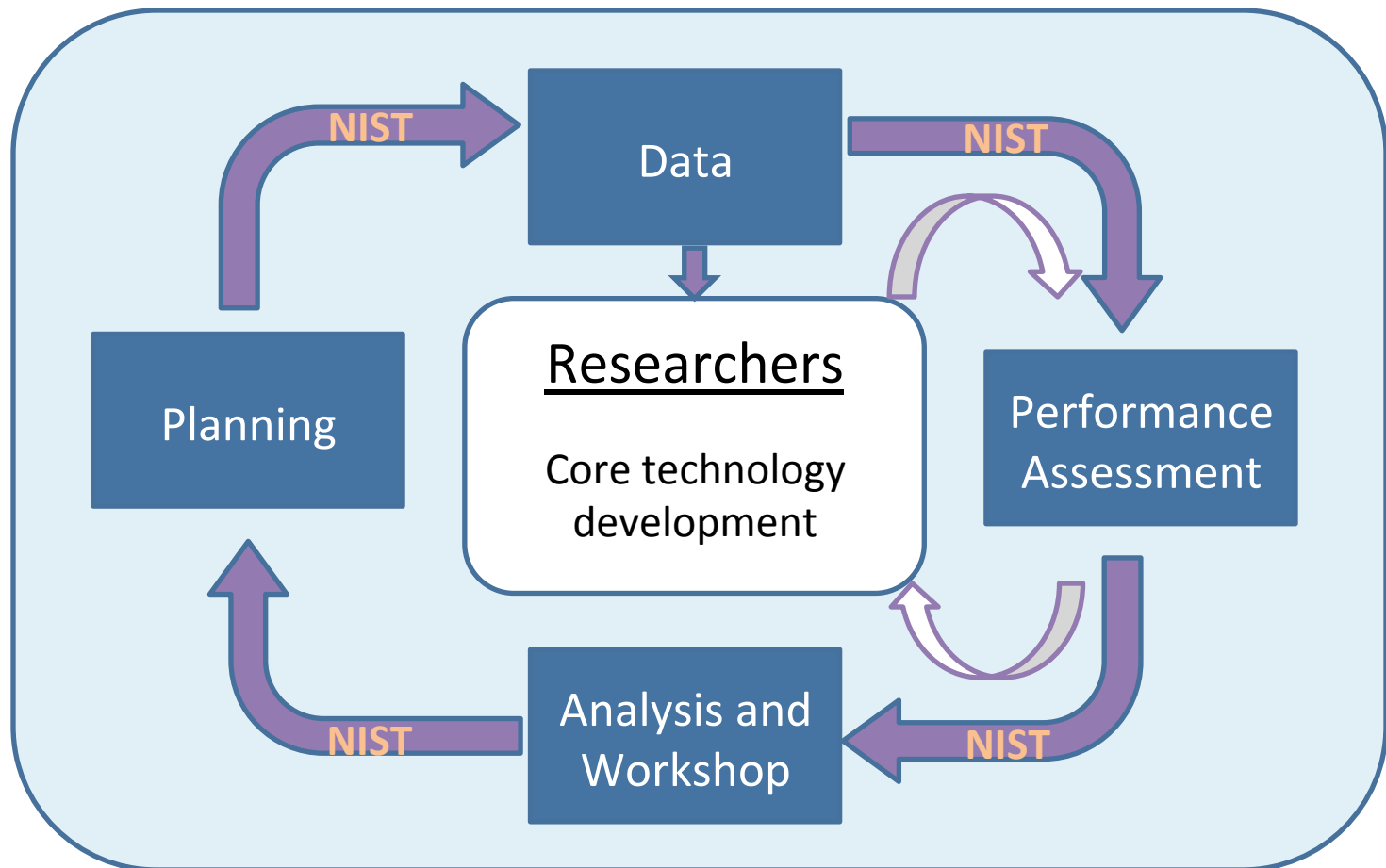- Voice Biometrics
- ANSI/NIST-ITL Standard Voice Record

Video

- Tracking (Person/Object)
- Event Detection
- Event Recounting
- Predictive Video Analytics

Machine Translation

- Text-to-Text
- Speech-to-Text
- Speech-to-Speech
- Image-to-Text
- Metric Development

Text Extraction

- Named Entity Identification
- Automatic Content Extraction

Data Science

- (new) Data Analytics

Definition: MIG's Evaluation Cycle

Evaluation Driven Research

NIST's MT Program's Legacy – Past 10 Years

- 27 Evaluation Events -- tracking the state-of-the-art in performance
  - (4) technology types   text-text   speech-text   speech-speech   Handwritten_Images-text
  - (9) languages   Arabic-2, Chinese, Dari, Farsi, Hindi, Korean, Pashto, Urdu, English

- 11 genres of structured and unstructured content
  (nwire, web, Bnews, Bconv, food, speeches, editorials, handwriting-2, blogs, SMS, dialogs)

- 60 Evaluation Test Sets available to MT researchers
  (source, references, metrics, sample system output and official results for comparison)

- Over 85 research groups

  AFRL – American Univ. Cairo – Apptek – ARL – BBN – BYU – Cambridge – Chinese Acad. Sci. – CMU – Columbia Univ. – Fujitsu Research – Google – IBM – JHU – Kansas State – KCSL – Language Weaver – Microsoft Research – Ohio State – Oxford – Qatar – Queen Mary (London) – RWTH Aachen – SAIC - Sakhr – SRI – Stanford – Systran – UMD – USC ISI – Univ. Edinburgh – Univ. of Karlsruhe – Univ. of Montreal – Xerox Research

>400 Primary Systems Evaluated

- 57% OpenMT
- 23% TIDES
- 11% TRANSTAC
- 5% GALE
- 3% / 1% BOLT