SRA PARTICIPATION IN TIPSTER PHASE II

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I. INTRODUCTION

SRA, although not a research contractor under Tipster Phase II, nonetheless actively participated in the program in a variety of ways. Some of the activities include:

- Preparation and distribution of the Named Entity Tagging and Discourse Tagging Tools for theSixth Message Understanding Conference (MUC6) and Multilingual Entity Task (MET)

- Implementation / Award of two Tipster application prototype systems: Bluesky and USACOM

- Sole contractor on two Tipster-affiliated systems, the Intelligence Analysts Associate (IAA) under funding from Rome Laboratories for NAIC, and the Overture program for OIR.

- Participation in the Contractor Architecture Working Group (CAWG)

- Participation in the Common Pattern Specification Language subgroup

Our current activities include support for the data extraction components of the ISX-led ISLE/InfoTech Tipster application.

II. RESEARCH PROGRAM HIGHLIGHTS

SRA engages in an active program of research and operational support in both multilingual data extraction, natural language processing more generally, and text retrieval integration. Our current research thrusts involve:

- The application of machine learning techniques to reduce the customization time for data extraction systems

- The use of multilingual data extraction for targeted machine translation or gisting

- Fusion of data extraction technology with other media (speech; video) for multimedia fusion applications

III. EVALUATIONS

SRA participated in the Sixth Message Understanding Conference in three of the four areas (Named Entity, Template Element, and Scenario Template). SRA participated in the Multilingual Entity Task (MET) in both Japanese and Spanish.

IV. PHASE III PLANS

On the research front, as a Tipster Phase III contractor, SRA intends to make significant advances in the customizability of extraction technology, primarily by bringing together our expertise in machine learning and natural language processing.

A second focus of our Phase III research plans involve the intelligent summarization of texts.

Finally, we intend to continue to contribute to the Contractor Architecture Working Group and other common efforts, and complete the Tipster application systems.