Working With the U.S. Government: Information Resources

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Abstract

This document provides information on how companies and researchers in machine translation can work with the U.S. Government. Specifically, it addresses information on (1) groups in the U.S. Government working with translation and potentially having a need for machine translation; (2) means for companies and researchers to provide information to the United States Government about their work; and (3) U.S. Government organizations providing grants of possible interest to this community.

1 Introduction

The Association for Machine Translation in the Americas (AMTA) frequently receives questions from companies and researchers about how they can work with the U.S. Government. Such questions concern (1) groups in the U.S. Government working with translation and potentially having needs for machine translation; (2) means for companies and researchers to provide information to the United States Government about their work; and (3) U.S. Government organizations providing grants. This paper addresses these three types of questions. It is selective rather than comprehensive. Updates to this information are provided on the Language Technology Resource Center (http://ltrc.mitre.org).

2 Information on U.S. Government Groups Doing Translation

There are many resources for understanding the needs of U.S. Government groups involved with translation. These resources include internet websites for: the Interagency Language Roundtable; the National Virtual Translation Center; the Defense Security Cooperation Agency; DARPA; and FedBizOpps. They also include the book *Translating and Interpreting in the U.S. Federal Government*.

2.1 FedBizOpps

Federal Business Opportunities, or FedBizOpps (http:/www.fedbizopps.gov), replaced Commerce Business Daily as a means of announcing U.S. Government Requests for Proposal (RFPs). One means of searching the site and of receiving announcements related to translation is to use the North American Industry Classification System (NAICS) code for Translators and Interpreters: 541930.

2.2 Interagency Language Roundtable

The Interagency Language Roundtable (ILR) is "an unfunded Federal interagency organization established for the coordination and sharing of information about language-related activities at the Federal level. It serves as the premier way for departments and agencies of the Federal government to keep abreast of the progress and implementation of techniques and technology for language learning, language use, language testing and other language-related activities.... The ILR plenary meetings are typically attended by from 75 to 100 individuals, representing more than thirty federal agencies and several academic institutions and Non-Governmental organizations."

(http://www.govtilr.org/ILR_History.htm).

Non-Government participants are welcome not only to the plenaries but also to the committee meetings, The Translation and Interpretation Committee focuses on "the appropriate use of machine translation, the evaluation of translation or interpretation ability, and the training and certification of skilled translators and interpreters."

Meetings are held once a month except in August. The schedule and plenary topics can be found at <u>http://www.govtilr.org/Calendars/2008-</u>9ILRCalendarPublic.htm.

The ILR has an email newsletter. Registration for this newsletter is available at

<u>http://www.govtilr.org/FAQ.htm#9</u>. In addition, the ILR provides descriptions of language proficiency skill levels descriptions and the ILR scale for measuring these skill levels. This information may be useful for understanding U.S. Government needs.

The ILR also provide links to internet information on language careers in the Department of Defense; the Department of State, the Federal Bureau of Investigation, the National Security Agency, the Defense Intelligence Agency, and other U.S. Government organizations:

<u>http://www.govtilr.org/ILR_career.htm</u>. Many of these internet sites provide information on the types of translation conducted.

2.3 National Virtual Translation Center

The National Virtual Translation Center (NVTC) was established "for the purpose of providing timely and accurate translations of foreign intelligence for all elements of the Intelligence Community." The NVTC goal (see http://www.nvtc.gov) is to augment existing government translation capabilities, including by: applying state-of-the-art technology to maximize translator efficiency.

A video is provided on the NVTC home page (see above) further describing their work.

2.4 Defense Security Cooperation Agency

The Defense Security Cooperation Agency (DSCA) includes Foreign Military Sales. Sales of technology to other countries could be a good application for machine translation, although DSCA has rarely been involved with translating documentation. Their internet web site is http://www.dsca.mil.

2.5 Translating and Interpreting in the U.S Government

One of the useful resources for learning about groups in the U.S. Government doing translation is the book *Translating and Interpreting in the U.S. Government* by Ted Crump, 2001. This book includes descriptions of over seventy organizations in the U.S. Government that employ translators or interpreters. For each organization, information (albeit 2001) is provided on the language pairs used, the mission, the number of translators, security clearances required, and contact information. The book is available online from the American Translators Association (ATA) at

https://www.atanet.org/kiosk/ATA_PubWare.pl.

The cost is \$30 for ATA members and \$50 for non-members.

3 Information on How to Tell the United States Government About Your Products

There are many ways to reach U.S. Government organizations with information about translation products, including: the Government Services Administration Schedule; In-Q-Tel; the Language Technology Forum; and the Language Technology Resource Center.

3.1 GSA Schedule

Companies can get a contract with the Government Services Administration (GSA), which will then be applicable to all federal agencies (see http://www.gsa.gov/language. GSA then publishes a schedule or list of these contractors.

Using the GSA Schedule greatly simplifies purchasing for Government customers. For purchases under \$2500, they can order with a Government credit card. For purchases over \$2500, they can consult three price lists or GSA Advantage (http:///gsa.advantage.gov)

Note that there are two GSA Schedules that focus on language: GSA Schedule 738-1 for Products and GSA Schedule 738-2 for Services (usually human translation and interpretation).

To get on the GSA Language Product Schedule and/or on GSA Advantage, a user can:

- Download the Language Product solicitation from www.fedbizopps.gov
- Complete the form and send it the address provided
- When contacted by a contracting officer, negotiate pricing
- Post information on the GSA Advantage website, following directions sent on from GSA on a CD.

Additional information is available at: http://www.gsa.gov/portal.

3.2 In-Q-Tel

In-Q-Tel is a non-profit organization that reviews products and research for the U.S. Government. Applications for evaluation are at: https://www.iqt.org/business-plans/guidelines.html

3.3 Language Technology Forum

The Office of the Directorate of National Intelligence (ODNI) Foreign Language Program Office (FLPO) sponsors the Foreign Language Technology Forum, which has the following goals, as described on the website

http://www.techforum.odniflpo.tswg.gov:

- To provide Industry and Academia with opportunities to describe their ideas and capabilities to government Forum attendees and demonstrate how their technologies meet IC mission needs; and
- To provide Government attendees with an opportunity to describe their needs to technology producers as well as to keep up to date on new developments in the field.
- To facilitate the application and review process of potential presentations from parties interested in making their ideas and technology known to the Forum's Members.

Companies and researchers can apply via the above website to present their work to the Technology Forum.

3.4 Language Technology Resource Center

The Language Technology Resource Center (LTRC)—formerly the Foreign Language Resource Center (FLRC)—was set up by MITRE to provide information on available and upcoming language tools. It became part of the Language and Speech Exploitation Resources Evaluation (LASER) Advanced Concept Technology Demonstration (ACTD), and then was moved to the Army, where it became a Program of Record.

The site includes an online tools survey based on information needs from Government planners, acquisitions officers, systems administrators, programmers, and users. The only required information is the name of the company and product, a short description of the product, and the name and contact information for further information. However, people are welcome to submit extensive information, including presentations and white papers. See <u>http://ltrc.mitre.org</u>.

4 Grants and Other Funding

Among the sources of grants and other funding are the Defense Advanced Research Projects Agency (DARPA), the Intelligence Advanced Research Project Agency (IARPA); the National Institute of Standards and Technology (NIST); the National Science Foundation (NSF); and the National Endowment for the Humanities (NEH).

4.1 DARPA

DARPA has two programs of particular relevance: Global Autonomous Language Exploitation (GALE) and Spoken Language Communication and Translation System for Tactical Use (TRANSTAC). According to the websites for these programs, there are no open solicitations at this time.

4.1.1 GALE

According to the GALE website

(<u>http://www.darpa.mil/ipto/programs/gale/gale.asp</u>) the goal of the GALE program is "to develop and apply computer software technologies to absorb, translate, analyze, and interpret huge volumes of speech and text in multiple languages, eliminating the need for linguists and analysts, and automatically providing relevant, concise, actionable information to military command and personnel in a timely fashion. Automatic processing 'engines' will convert and distill the data, delivering pertinent, consolidated information in easy-to-understand forms to military personnel and monolingual Englishspeaking analysts in response to direct or implicit requests" The program manager is Dr. Joseph Olive.

4.1.2 TRANSTAC

According to the TRANSTAC website (http://www.darpa.mil/ipto/programs/transtac/transtac.as p), "The mission of the Spoken Language Communication and Translation System for Tactical Use (TRANSTAC) program is to demonstrate capabilities to rapidly develop and field two-way translation systems that enable speakers of different languages to spontaneously communicate with one another in real-world tactical situations." The program manager is Dr. Mari Maeda.

4.2 IARPA

"Socio-Cultural Content in Language" is a fiveyear program is run by the Intelligence Advanced Research Projects Activity (IARPA), in conjunction with the Department of Interior, National Business Center (NBC), Acquisition Services Directorate, Sierra Vista Branch at Fort Huachuca, AZ. According to the program website

(http://www.nbc.gov/acquisition/fort_h/scil.html),

it is open to all research and development organizations located in the U.S., including large and small businesses, academic and eligible non-profit and not-for-profit institutions and collaborative ventures from mixed sources.

The goals of the program are to:

- Seek innovative, creative, cutting-edge research to achieve advancements in technologies that significantly expand human language understanding
- Develop new approaches to expanding our knowledge of context, meaning and identity
- Discover, characterize and automate the correlation of a wide range of socio-

cultural phenomena of groups with evidence from the language used by those groups

This project is currently in its second of five years. The Contracting Office POC is Inna Lloyd at Inna_I_Lloyd@nbc.gov or (520) 533-5248.

4.3 NIST

NIST's Technology Innovation Program (TIP) has the objective of providing "cost-shared awards to industry, universities and consortia for research on potentially revolutionary technologies that address critical national and societal needs" (http://www.nist.gov/tip/). However, the deadline for applications for 2009 was in September 2008.

4 NSF and NEH

Grants from the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH) are listed at

<u>http://www.grants.gov</u>. A search on "machine translation" produces no hits at this time.

The National Science Foundation (NSF) has a "Find Funding" site enabling users to search across all NSF programs: <u>http://www.nsf.gov/funding/</u>. Searching for "machine translation" under "active funding opportunities" produces one hit: Solicitation NSF8578. Possibly relevant sections of this solicitation include Data Intensive Computing (<u>http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5_03324&org=NSF</u>) and Network Architecture and Protocol Design Challenges

(http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5_03325&org=NSF).

Data Intensive Computing addresses some questions of concern to Statistical Machine Translation, including: "What (new) applications can best exploit this computing paradigm, and how must this computing paradigm evolve to best support the data-intensive applications we may seek?"

Network Architecture and Protocol Design addresses issues relevant to embedded machine translation in "seeking discovery, invocation and composition of globally distributed, highly evolving services and information systems designed for networks of extreme heterogeneity and complexity."

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5_03325&org=NSF_

NSF and NEH have a new program that "supports projects to develop and advance knowledge concerning endangered human languages. Made urgent by the imminent death of an estimated half of the 6000-7000 currently used human languages, this effort aims also to exploit advances in information technology."

(http://www.nsf.gov/funding/pgm_summ.jsp?pims _id=12816&govDel=USNSF_39).

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- National Institute for Science and Technology (NIST) Technical Innovation Program (TIP): http://www.nist.gov/tip/)
- National Science Foundation funding: http://www.nsf.gov/funding/ National Science Foundation funding for Data Intensive Computing:
 - (http://www.nsf.gov/funding/pgm_summ.jsp?pims_id =503324&org=NSF)

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