

## CURRICULUM VITAE

### Naicong Li

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### EDUCATION

**Ph.D.** in Linguistic, State University of New York at Buffalo, 1991.

**M.S.** in Computer Science, State University of New York at Buffalo, 1987.

**M.A.** in Linguistics, State University of New York at Buffalo, 1983.

**B.A.** in French, Peking University, China, 1982.

### RELATED PROFESSIONAL EXPERIENCE

**Senior GIS analyst**, The Redlands Institute, University of Redlands, September 2005 – present. Research in ontology-driven semantic technology to be applied in spatially enabled knowledge management system; application domain and project ontology design; urban growth modeling using agent-based modeling and GIS; collaboration with UCSB on NGA funded research project on spatial web, networked gazetteers.

**GIS consultant**, Environmental Systems Research Institute (ESRI), March 2005 – present. Programmer for ArcSketch, an ArcGIS extension which offers intuitive sketching tools, symbol driven sketching, and automated feature class/field/value creation.

**GIS Consultant**, Jones and Jones Architects and Landscape Architects, May 2004 – March 2005. Developed ILARIS, a GIS model for evaluating landscape visual quality, which won the ASLA 2006 Award of Honor in Research.

**Senior Linguistic Analyst** at Language Systems, Inc., May 2000 – October 2003. Responsible for designing and implementing an advanced natural language (text) translation engine using the transfer approach. Responsible for incorporating the translation engine into Coptrans and MedTrans, which are expectation-based speech-to-speech machine translation applications used by law enforcement agencies and hospitals.

**Senior Programmer/Analyst** at Countrywide Home Loans, Department of Artificial Intelligence, September 1998 – May 2000. Redesigned and implemented Mustang, the rule based expert system or loan compliance checking.

**Senior Linguistic Analyst** at Language Systems, Inc., February 1997 – August 1998. Designed and implemented a knowledge based translation system, including a concept network and the reasoning module, a module that builds semantic representation for the input sentence, and the module for target language generation.

**Linguistic analyst** at Language Systems, Inc. August 1991 – October 1995. Participated in a project for evaluating various natural language processing systems. Designed and implemented the morphological analysis module in LSI's machine translation system. Developed the automatic testing capability for the system. Designed and implemented a discourse processing module for tracking discourse entities. Designed and implemented various tools for knowledge based text data analysis and information extraction from texts.

## SELECTED PUBLICATIONS AND PRESENTATIONS

- Li, N., Strout, N., Agrawal, A. & Burgess, P. (2006) Building an Urban Growth Model with ArcGIS Agent Analyst. Presentation at the ESRI 2006 International User Conference, San Diego, CA.
- Overdorf, C. L. & Li, N. (2005) *Protecting Signature Landscapes That Define the Nature of Our Different Sub-Regions*. Presentation at URISA Washington Chapter GIS in Action Conference, Tukwila, Washington.
- Jones, G. & Li, N. (2004) *Giving a Voice to Intrinsic Landscape of Puget Sound: A Case Study for a Landscape Information System (ILARIS)*. Presentation at ASLA Annual Conference, Salt Lake City, Utah.
- Montgomery, C. A., Li, N., Kass, M. & Zarazua, D. (2003) *Pocketable Language Translation System for Use in Noisy Environments*. ONR-STTR Report, Contract No. N00014-02-M-0225.
- Montgomery, C. A., Li, N., Kass, M. & Zarazua, D. (2003) *A Spoken Language Forms Translator for Information Transactions*. NIST Advanced Technology Program. Cooperative Agreement No. 70NANB8H4055.
- Montgomery, C. A. & Li, N. (2002) *Issues in Speech-to-Speech Translation*. Proceedings of the Association for Machine Translation in the Americas, Tiburon, CA.
- Belvin, R., Montgomery, C. A., Stalls, B. G., Litenatsky, S. H., Li, N., & Arnaiz, A. R. (1997) *Machine-aided Voice Translation: Advanced Development Model*, Rome Laboratory/IRAA, Contract No. F30602-93-C-0098.
- Montgomery, C. A., Stalls, B. G., Stumberger, R. E., Li, N., Belvin, R. S., Arnaiz, A. R. & Litenatsky, S. H. (1995) *The Machine-Aided Voice Translation System*. Proceedings of the 14<sup>th</sup> Annual International Voice Technologies Applications Conference (AVIOS '95), pp. 109-111.
- Montgomery, C. A., Stalls, B. G., Stumberger, R. E., Li, N., Belvin, R. S. & Arnaiz, A. R. (1994) *Evaluation of the Machine-Aided Voice Translation (MAVT) System*. Proceedings of the Workshop on Machine Translation Evaluation: Basis for Future Directions. November 1992, San Diego, CA.
- Montgomery, C. A., Stumberger R. E., Stalls, B. G., Li, N., Belvin, R. S. & Litenatsky, S. H. (1993) *Description of the DBG System as Used for MUC-5*. Proceedings of the Fifth Message Understanding Conference (MUC-5), pp. 121-136. Sponsored by Defense Advanced Research Projects Agency (DARPA). San Mateo: CA. Morgan Kaufmann Publishers.
- Montgomery, C. A., Stalls, B. G., Stumberger, R. E., Li, N., Walter, S., Belvin, R. S. & Arnaiz, A. R. (1993) *Machine-Aided Voice Translation*. Information Management Collection Processing & Distribution, Dual-Use Technologies & Applications Conference, IEEE, pp. 96-101.
- Montgomery, C. A., Stalls, B. G., Stumberger, R. E., Li, N., Belvin, R. S., Arnaiz, A. R. & Hirsh, S. B. (1992) *Description of the DBG System as Used for MUC-4*. Proceedings of the Fifth Message Understanding Conference (MUC-4), pp. 197-206. Sponsored by Defense Advanced Research Projects Agency (DARPA). San Mateo: CA. Morgan Kaufmann Publishers.
- Zubin, D. A. & Li, N. (1990) *Discourse Continuity and Perspective Taking*. Proceedings of the Chicago Linguistics Society, 26. Included (1995) in J. F. Duchan, G. A. Bruder & L. E. Hewitt (Eds.), *Deixis in Narrative* (pp. 287-308). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Zubin, D. A., Chun, S. A., & Li, N. (1990). *Misbehaving Reflexives in Korean and Mandarin*. Proceedings of the 16<sup>th</sup> Annual Meeting of the Berkeley Linguistics Society, 16, pp. 338-354.