

Education

Ph.D. (1991) **Artificial Intelligence (AI)**. AI Laboratory, Dept. of Electrical Engineering and Computer Science (EECS). Massachusetts Institute of Technology (MIT), Cambridge MA.

S.M. (1986) **Computer Science**. EECS. MIT, Cambridge MA.

B.Sc(Eng). (1984) **Computing Science**. First Class Honours. Imperial College of Science and Technology. University of London, London UK. Associateship of the City and Guilds of London Institute (ACGI).

Appointments

- On sabbatical leave. (Visiting Scholar, Kyoto University.) 2016-2017
 - **Associate Professor**. (Tenured.) Department of Linguistics and Department of Computer Science. University of Arizona. Tucson AZ. 2005-*present*
 - **Director, Human Language Technology (HLT) Master's Program**. Dept. of Linguistics, University of Arizona. 2006-*present*
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- **Project Professor**. Dept of Language and Information Sciences. Graduate School of Arts and Sciences. University of Tokyo, Tokyo, Japan. Jan-Mar 2010
 - **Visiting Associate Professor**. Carnegie Mellon University (CMU) in Qatar. Doha, Qatar. Nov-Dec 2009
 - **Japan Society for the Promotion of Science (JSPS) Fellow**. Dept of Language and Information Sciences. Graduate School of Arts and Sciences. University of Tokyo, Tokyo, Japan. Dec 2008 - Oct 2009
 - **Visiting Researcher**. Laboratory for Information and Decision Systems (LIDS). MIT, Cambridge MA. Jan-Aug 2008
 - **Assistant Professor**. Depts. of Linguistics and Computer Science. University of Arizona. Tucson AZ. 2003-2005
 - **Visiting Lecturer**. Linguistics Program. Princeton University, Princeton NJ. 2002
 - **Research Scientist**. (1994-2003). Provisional Research Scientist (1991-1994). Computer Science Division. NEC Research Institute. Princeton NJ. 1991-2003

Publications

- The Minimalist Machine. Fong, S. and J. Ginsburg. Research monograph. in prep.
- A Computational Implementation of Classifier Structures in Mandarin Chinese. Chen, Y-L. to
and S. Fong. Proceedings of Logic and Engineering of Natural Language Semantics 12 appear.
(LENLS 12), Tokyo, Japan. November 15-17 2015.
- Colorless green ideas do sleep furiously: the necessity of grammar. Sprouse, J., I. Sagar, S. 2015
Fong, R.C. Berwick. NELS-46, NELS46, October 16-18. Concordia University.
- Stack-based Agree. Ginsburg, J. and S. Fong. Proceedings of JELS 32 (Papers from the 32nd 2015
Conference and the 7th International Spring Forum).
- Unification and Efficient Computation in the Minimalist Program. Fong, S. In *Language and* 2015
Recursion. Lowenthal, F. and L. Lefebvre (Eds.) Springer-Verlag.
- A new approach to tough-constructions. In *Proceedings of the 31st West Coast Conference on* 2014
Formal Linguistics (WCCFL 31), ed. by Robert E. Santana-LaBarge. 180-188. Somerville,
MA: Cascadilla Proceedings Project.
- Treebank Parsing and Knowledge of Language. Fong, S. et al. (pp. 133-172). In T. Poibeau 2014
et al. (eds.), *Cognitive Aspects of Computational Language Acquisition, 133 Theory and*
Applications of Natural Language Processing, Springer-Verlag Berlin Heidelberg 2012
- Modeling of Coreference Relations in Multi-Object Constructions. Fong S. and J. Ginsburg. 2012
In Proceedings of TCP 2012. Ed. Otsu, Y. Hituzi Publishing Company.
- Computation with doubling constituents: Pronouns and antecedents in Phase Theory. Fong, 2012
S. and J. Ginsburg. In *Towards a Biolinguistic Understanding of Grammar*. Ed. Di Sciullo, A.M.
John Benjamins.
- Pronoun-Antecedent Relations from Last Resort Movement. Ginsburg, J. and S. Fong. In 2010
Proceedings of the thirty-ninth Western Conference on Linguistics. (WECOL 2010). Eds. Bailey,
D. and V. Teliga. 277-288.
- Improving and Aligning Speech with Presentation Slides. Swaminathan, R., M.E. Thompson, 2010
S. Fong, A. Efrat and K. Barnard. In *Proceedings of the 20th International Conference on Pattern*
Recognition (ICPR). 23-26 August. Istanbul, Turkey. IEEE. 3280-3283.
- A Computational Analysis of Turkish in the Principles and Parameters Framework. Birturk, 2009
A. and S. Fong. In Proceedings of the 4th Language & Technology Conference (LTC):
Human Language Technologies as a Challenge for Computer Science and Linguistics. Poznań,
Poland.
- Parsing in the Minimalist Program: On SOV Languages and Relativization. Fong, S. 2009
Canadian Journal of Linguistics (CJL) 53(2-3), 237-252.
- Treebank Parsing and Knowledge of Language: A Cognitive Perspective. Fong, S. and R.C. 2008
Berwick. In Proceedings of the 30th Annual Meeting of the Cognitive Science Society. 2008.
- Arabic PAPPI. Fong, S. In Benmamoun, B. (Ed.) *Perspectives on Arabic Linguistics XIX*. 2007

John Benjamins, 19–35.

- Modeling Q-Feature Movement in Japanese. Ginsburg, J. and S. Fong. Volume 15: Coyote Papers: Working Papers in Linguistics, Psycholinguistic and Computational Perspectives. Brewer, Jordan, P. O'Rourke and P. Richtsmeier (eds.). University of Arizona Linguistics Circle. 2007
- Obstacles and regions. Fellbaum, C. and S. Fong. *Linguistica Computazionale*, Vol XXII-XXIII. Istituti Editoriali E Poligrafici Internazionali, Pisa-Rome. 69-88. 2006
- Constructing filler-gap dependencies in Chinese possessor relative clauses. Lin, C.-J. , S. Fong, and T. G. Bever. In *Proceedings of PACLIC19*. Academia Sinica, 143-154. 2005
- Minimalist parsing and Japanese: on theory and experiential factors. Fong, S. and Y. Hirose. In *Proceedings of the Sixth Tokyo Conference on Psycholinguistics*, Ed. Otsu, Y. Hituzi Syobo Publishing Co., 95-116. 2005
- Computation with probes and goals: a parsing perspective. Fong, S. In Di Sciullo, A.M. and R. Delmonte (Eds.) *UG and External Systems*. John Benjamins, 311-334. 2005
- Morpho-syntax parsing. Di Sciullo, A.-M. and S. Fong. In Di Sciullo, A.M. and R. Delmonte (Eds.) *UG and External Systems*. John Benjamins, 247-268. 2005
- Semantic opposition and WordNet. Fong, S. *Journal of Logic, Language and Information*. 13: 159–171. 2004
- Prosodic phrasing in Japanese and parsing in the minimalist program. Fong, S. & Y. Hirose. 21st Annual Meeting of the Japanese Cognitive Science Society, 314-315. 2004
- On the ontological basis for logical metonymy: telic/agentive roles and WordNet. Fong, S. *Proceedings of OntoLex 2002*. Las Palmas, Canary Islands, Spain. 2002
- What does it mean to be a shelf? Semantic bleaching and WordNet.” Fong, S. *Proceedings of the 1st Global WordNet Conference (GWN)*, January 22–25, Mysore, India. 351–359. 2002
- Ghosts, Shadows and resultatives: the lexical representation of verbs. Fong, S., C. Fellbaum & D. Lebeaux. In *Traitement Automatique des Langues (TAL) journal*, issue 42:3. 2001
- Japanese PAPPI. Fong, S. In *Researching and Verifying an Advanced Theory of Human Language, Report (5)*, Kanda University of International Studies (KUIS), Chiba, Japan. 445–464. 2001
- Efficient parsing for word structure. Di Sciullo, A.M. & S. Fong. In *Proceedings of the 6th Natural Language Processing Pacific Rim Symposium (NLPRS-2001)*, 741-748. 2001
- A modular approach to Turkish noun compounding: The Integration of a Finite-State Model. Birturk, A. & S. Fong. In *Proceedings of the 6th Natural Language Processing Pacific Rim Symposium (NLPRS-2001)*, 525–531. 2001
- The color of semantic opposition in WordNet. Fong, S. *Proceedings of the 3rd Workshop on Inference in Computational Semantics (ICoS-3)*, Siena, Italy. 2001
- On mending a torn dress: the frame problem and WordNet. Fong, S. *Proceedings of the* 2001

- Workshop on WordNet and Other Lexical Resources, North American Chapter of the Association for Computational Linguistics (NAACL).
- Shadows: a type of non-subcategorized object. Fong, S., C. Fellbaum & D. Lebeaux. In 2001
Proceedings of the First International Workshop on Generative Approaches to the Lexicon
(GL-2001).
 - Asymmetry, zero morphology and tractability. Di Sciullo, A.M. & S. Fong. In Proceedings of 2001
the 15th Pacific Asia Conference on Language, Information and Computation (PACLIC-15),
61–72.
 - Natural Language Grammatical Inference with Recurrent Neural Networks, Lawrence, S., 2000
C.L. Giles & S. Fong. IEEE Trans. on Knowledge and Data Engineering. Vol. 12, No. 1,
126–40.
 - Verb classes and resultative selection in a computational lexicon. Fong, S., C. Fellbaum & D. 2000
Lebeaux. In Proceedings of the 1st Meeting on Speech Technology, Seville, Spain.
 - Semantic templates and transitivity alternations in the lexicon. Fong, S., C. Fellbaum & D. 2000
Lebeaux. In Proceedings of the 7th Conference on Automatic Natural Language Processing
(TALN-2000), pp. 167–176.
 - The representation of verbs and resultatives in a computational lexicon. Fong, S., C. 2000
Fellbaum & D. Lebeaux. In Proceedings of the Workshop on Computational Lexicography
and Multimedia Dictionaries (COMLEX-2000), 67-70.
 - Parallel principle-based parsing. Fong, S. In Proceedings of the Sixth International 1999
Workshop on Natural Language Understanding and Logic Programming (NLULP '99),
International Conference on Logic Programming (ICLP), 45–57.
 - Dealing with nominalization in Mandarin Chinese using a principles and parameters parser. 1998
Lin, Koong H.C., V.W. Soo & S. Fong, International Journal of Computer Processing of
Oriental Languages (CPOL), Vol 11(3), 291–310.
 - Dealing with nominalization in Mandarin Chinese using a principles and parameters parser. 1997
Lin, Koong H.C., S. Fong and V.W. Soo. In Proceedings of ICCPOL 1997.
 - Natural language grammatical inference: a comparison of recurrent neural networks and 1996
machine learning methods. Lawrence, S., S. Fong & C. L. Giles. In Connectionist, statistical,
and symbolic approaches to learning for natural language processing. Eds: Wermter, S. & E.
Riloff & G. Scheler. Lecture Notes in Artificial Intelligence. Springer-Verlag. 33-47.
 - On the applicability of neural network and machine learning methodologies to natural 1995
language processing. Lawrence, S., S. Fong & C. L. Giles. In Proceedings of the Workshop
on New Approaches to Learning for Natural Language Processing. International Joint
Conference on Artificial Intelligence (IJCAI).
 - A quarter century of computation with transformational grammar. Berwick, R.C. & S. Fong. 1995
In Linguistics and Computation, Eds. Cole, J. et al., CSLI Lecture Notes No. 52, Stanford
University, 103–143.

- Madama Butterfly redux: parsing English and Japanese with a principles-and-parameters approach.” Berwick, R.C. & S. Fong. In Japanese Sentence Processing, Eds. R. Mazuka et al. Lawrence Erlbaum, 177–208. 1995
- Cartesian computation: the PAPPi project, S. Fong. In Proceedings of the Fifth International Workshop on Natural Language Understanding and Logic Programming (NLULP’95). 1995
- Towards a proper linguistic and computational treatment of scrambling: An Analysis of Japanese. Fong, S. In Proceedings of the Sixteenth International Conference on Computational Linguistics (COLING-94). 1994
- Isolating cross-linguistic parsing complexity with a principles-and-parameters parser: a case study of Japanese and English.” Fong, S., & R.C. Berwick. Proceedings of the Fifteenth International Conference on Computational Linguistics (COLING-92). 1992
- Principle-based parsing and type inference. Fong, S. In Natural Language and Logic Programming, III. Eds. Brown, C. & G. Koch, Elsevier Science Publishers B.V. (North Holland), 43–60. 1991
- The computational implementation of principle-based parsers. Fong, S. In Principle-Based Parsing: Computation and Psycholinguistics, Ed. Berwick, R.C. et al. Studies in Linguistics and Philosophy 44. Kluwer, 65–82. 1991
- Free indexation: combinatorial analysis and a composition algorithm. Fong, S. In Proceedings of the 28th Annual Meeting of the Association for Computational Linguistics (ACL). 1990
- The computational implementation of principle-based parsers. Fong, S. & R.C. Berwick. In Current Issues in Parsing Technologies. Ed. Tomita, Kluwer. 1990
- Principle-based parsing: natural language processing for the 1990s. R.C. Berwick & S. Fong. In Artificial Intelligence at MIT: Expanding Frontiers. Ed. Winston, P.H. MIT Press, 286–325. 1990
- New approaches to parsing conjunctions using Prolog. Fong, S. & R.C. Berwick. In Proceedings of the 23rd Annual Meeting of the Association for Computational Linguistics (ACL), 118–126. 1985
- Revised version of paper also appears in the Proceedings of the 9th International Joint Conference on Artificial Intelligence (IJCAI-85).

Presentations (since 2000)

- Colorless green ideas still do sleep furiously. Berwick, R.C., B. Yankama, S. Indurkya, S. Fong & J. Sprouse. GLOW39. Göttingen, Germany. 2016
April 5–8
- *uT Checking in Relative Clauses*. Ginsburg, J. and S. Fong. Poster presentation. 2016
LSA 2016 Annual Meeting. Washington DC. January 7–10
- *Towards a Minimalist Machine: A Stack Architecture*. Fong, S. and J. Ginsburg. 2015
Invited talk. Computation and Linguistic Theory: First Workshop on October 10–11

- Minimalist Parsing. MIT.
- *Towards a Minimalist Machine: Combining Linguistic Theories*. Ginsburg, J. and S. Fong. Invited talk. Computation and Linguistic Theory: First Workshop on Minimalist Parsing. MIT. 2015
October 10-11
 - *Stack-Based Agree*. The English Linguistic Society of Japan (ELSJ) 7th International Spring Forum 2014. Doshisha University: Kyoto, Japan. 2014
April 19-20
 - *Modeling of Coreference Relations in Multi-Object Constructions*. Ginsburg, J. and S. Fong. Poster. The 13th Tokyo Conference on Psycholinguistics. Keio University. Japan. 2012
March 9-10
 - *On the generative capacity of languages: human and non-human*. Fong, S. and D. Demolin. 2011
November 28
November 17
 - Computer Science Seminar Series. Carnegie Mellon University at Qatar. Doha.
 - *also* Invited talk. School of Modern Languages and School of Interactive Computing. Georgia Institute of Technology. August 26
April 11
 - *also* Linguistics Colloquium. University of Arizona.
 - *also* *SISTA (School of Information: Science, Technology and Arts) Colloquium Series*
 - *Idioms and Culture: Challenge and Opportunity*. 2011
November 25
 - *Natural language parsing: Treebanks and the knowledge of language*. 2011
November 17
 - Invited talk. School of Modern Languages and School of Interactive Computing. Georgia Institute of Technology.
 - *A tutorial on natural language parsing, semantics and question answering*. 2011
November 17
 - Invited talk. School of Modern Languages and School of Interactive Computing. Georgia Institute of Technology.
 - *A computational implementation of syntactic binding theory in the Minimalist Program*. Fong, S. and J. Ginsburg. 2nd Joint Arizona State University (ASU)/University of Arizona (UA) Linguistics Symposium. Tempe, AZ. 2011
October 1
 - *Minimalist Parsing: simplicity and feature unification*. Fong, S. Conference on Language and Recursion. University of Mons. Belgium. 2011
March 14-16
 - *Pronoun-Antecedent Relations from Last Resort Movement*. Ginsburg, J. and S. Fong. West Coast Conference on Linguistics (WECOL). Fresno, CA. 2010
November 11-13
 - *Language parsing, semantics and question answering (QA)*. Fong, S. Ephibian Speaker Series in MIS. University of Arizona. 2010
September 17
 - Talks on *Multilingual Parsing, Semantics and Question Answering Systems* Workshop Series on Human Language Technologies. Carnegie Mellon University (CMU) in Qatar. Doha, Qatar. 2009
December 5
 - *Language, Grammar and Computation* 2009

- CS Seminar Series. Carnegie Mellon University (CMU) in Qatar. Doha, Qatar. November 23
- *Human Language Technology: What you can and cannot do with lots of data.* 2009
Carnegie Mellon University (CMU) in Qatar. Doha, Qatar. April 26
 - *Can Statistical Parsers WOW! You: A Cognitive Assessment.* Fong, S. and R.C. 2008
Berwick. Psychocomputational Models of Human Language Acquisition July 23
(PsychoCompLA-2008) workshop at the 30th Annual Meeting of the Cognitive Science Society.
 - *Cognition and Statistical Natural Language Parsing.* Princeton University. May 8
 - *Statistical Natural Language Parsing: Reliable Models of Language?* Special 1-day 2007
MIT Workshop: Where Does Syntax Come From? Have We All Been Wrong? October 19
MIT, Cambridge MA.
 - *The SLIC Video Browsing System Project description and future plans.* Kobus, B., A. September 4
Efrat and S. Fong. Computer Science Colloquium. University of Arizona, Tucson AZ.
 - *The Great (Penn Treebank) Robbery: When statistics is not enough.* Berwick, R.C., M. August 1
Coen, S. Fong and P. Niyogi. Psychocomputational Models of Human Language Acquisition (PsychoCompLA-2007). Nashville TN.
 - *Subtitling and Automatic Speech Recognition.* Fong, S. and R. Swamranjini. July 14-15
Mental Architecture for Processing and Learning of Language (MAPLL). Hiroshima Universty, Japan.
 - *Opportunities and Challenges for Linguistic Theory in Computation.* Computer 2006
Science Colloquium Series. University of Arizona, Tucson AZ. November 30
 - *Parsing and multiple Wh-questions in Japanese.* Fong, S. and J. Ginsburg. Fifth July 15
International Workshop on Evolutionary Cognitive Sciences. Tokyo University, Tokyo, Japan. April 24
 - *Computing with Linguistic Theory.* ECE Distinguished Lecturer Series. Dept. of Electrical and Computer Engineering. University of Arizona, Tucson AZ.
 - *Cost and Benefit of Scrambling in Japanese Relative Clauses.* Hirose, Y. and S. Fong. 2005
Japanese Cognitive Science Society Conference (JCSS 2005) Kyoto University. July 29-31
 - *Arabic PAPP: A Principles-and-Parameters Parser.* The 19th Annual Symposium April 1-3
on Arabic Linguistics. University of Illinois at Urbana-Champaign. 2005
 - *Minimalist Program Parsing: Theory and experimental results.* Fong, S. The 18th March 31-April 2
Annual CUNY Sentence Processing Conference. University of Arizona. March 18-19
 - *Evidence for Parsing Universals from Turkish and Japanese.* The 6th Tokyo Conference on Psycholinguistics (TCP 2005). January 14
 - *Modeling Linguistic Theory on a Computer: From GB to Minimalism.* MIT IAP Computational Linguistics Fest
 - *Minimalist Parsing: SOV Languages and Relative Clauses.* Fourth Annual 2004
Conference of the Federation on Natural Language Processing: Interfaces July 30 – August 1

- Conference. IPSI-2004. Pescara, Italy.
- *Traitement relationnel des composées*. Di Sciullo, A.M. and S. Fong. Fondements Relationnels du Traitement des Langues Naturelles, ACFAS Conference, UQAM, Montreal, Canada. May 10
 - *Parsing in the Minimalist Program*. Invited lecture. Joint Geneva-Lausanne doctoral program workshop. University of Geneva, Switzerland. April 29
 - *Japanese to English Machine Translation Evaluation*. Language Technologies Institute (LTI), CMU, Pittsburgh. 2003
November 21
 - *Obstacles and Regions*. Fong, S. & C. Fellbaum. Workshop on Ontological Knowledge and Linguistic Coding at the 25th annual meeting of the German Linguistics Society (Deutsche Gesellschaft für Sprachwissenschaft), Munich, Germany. February 26
 - *The Verb Lexicon and Event Template Design*. Institute for Linguistics, University of Potsdam, Potsdam, Germany. February 24
 - *Fixed Expressions, Body Parts and Machine Translation*. Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, Germany. January 25
 - *The Structuring of Knowledge: Three Views from Inferencing and WordNet*. Berlin-Brandenburg Academy of Sciences and Humanities, Berlin, Germany. January 24
 - *Resultatives and Shadows*. Verb Meeting, Institute for Research in Cognitive Science (IRCS), University of Pennsylvania. 2002
November 21
 - *Minimalist Parsing*. CUNY Psycholinguistics Supper Club, CUNY Graduate Center, New York. November 12
 - *Verb Classes and WordNet: Obstacles and Regions*. Institute for Systems Science and Biomedical Engineering of the Italian National Research Council (LADSEB-CNR), Padua, Italy. October 8
 - *Computation with Probes and Goals: A Parsing Perspective*. The 2nd Conference of the Federation on Natural Language Processing: Language, Brain and Computation. University of Venice, Venice, Italy. October 3–5
 - *Three Views on WordNet from Semantic Inference*. MIT Artificial Intelligence Laboratory, Cambridge MA. March 15
 - *WordNet: Three Views on Semantic Inference*. University of Montreal, Canada. February 28
 - *The PAPPi System: Languages and Parameterization*. International Institute of Information Technology, Hyderabad, India. January 28
 - *PAPPi: A Logic-Based System for Multilingual Parsing*. Miyagi Gakuin Women's College, Sendai, Japan. 2001
December 6
 - *Semantic Inference and WordNet*. Yokohama National University, Yokohama, Japan. November 16
 - *The PAPPi System: Languages and Parameterization*. Colloquium on Language Issues, Rabat, Morocco. October 24–26

- *Efficient Parsing for Word Structure*. Fong, S. & A.M. Di Scullo. Conference on Grammar and NLP, UQAM, Montréal, Canada. October 14
- Lexical Semantics, Semantic Opposition and WordNet. Math Linguistics seminar, Department of Linguistics, UCLA. July 24
- *Morphology and Tractability*. Fong, S. & A.M. Di Scullo. Asymmetry Conference. UQAM, Montréal, Canada. May 7-10
- *Ghosts, Shadows and Resultatives: The Lexical Representation of Verbs*. Colloquium on Computational Linguistics, University of Maryland at College Park. May 2
- *The PAPPi System: Overview and Recent Developments*. Department of Computer Science, University of Tokyo, Tokyo, Japan. 2000
December 12
- *The PAPPi System: Overview and Demonstration*. Princeton University Linguistics Program Seminar, Princeton, NJ. November 30
- *Two Types of Non-Subcategorized Objects: Shadows and Ghosts*. The Eleventh Computational Linguistics in the Netherlands Meeting (CLIN-2000), Tilburg, Holland. November 3
- *The Verb Lexicon and Semantic Templates*. Institute for Language and Speech Processing (ILSP), Athens, Greece. September 19
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Grant Activity

- Co-PI on Natural Human-Robot Interaction in Bilingual Cross Cultural Settings. With Carnegie Mellon University (CMU) Qatar and Pittsburgh. Qatar National Research Foundation (QNRF). 2011-2014
- Co-PI on *Asymmetry at the Interfaces*. Amount: CDN\$2.5M, 6.25% effort. Social Sciences and Humanities Research Council of Canada (SSHRC). Project Director: Anna Maria Di Scullo. Lead institution: University of Québec at Montréal (UQAM). 2004-2009
- Collaborateur (Consultant) Computational Morphology. *Les asymétries des langues naturelles et leur traitement par les systèmes de performance*. Amount: CDN\$1.8M, 5% effort. Social Sciences and Humanities Research Council of Canada (SSHRC). Project Director: Anna Maria Di Scullo, University of Québec at Montréal (UQAM), 2000-2003
- Cooperative Member (Consultant) Natural Language Parsing in Japanese. *Researching and Verifying an Advanced Theory of Human Language*. Amount: ¥300M, 5% effort. Grant-in Aid for Center of Excellence (COE) Research. Japanese Ministry of Education, Science and Culture. Research Leader: Kazuko Inoue. Graduate School of Language Sciences, Kanda University of International Studies 1998-2000

(KUIS), Chiba, Japan.

Internships

- IBM T.J. Watson Research Center. Hawthorne. N.Y. 1986-1987
Prototype qualitative reasoning system for computer system performance diagnosis.
- Daresbury Nuclear Physics Laboratory. Science and Engineering Research Council 1983
of Great Britain (SERC). Warrington. England.
Implementation of relational database management package

Awards

- Japan Society for the Promotion of Science (JSPS) Invitational Fellowship Award. 2008
Tokyo, Japan.
- IBM Graduate Fellow Award. EECS. MIT, Cambridge MA. 1987-1990
- J.F. Kennedy Scholar. Kennedy Memorial Trust. MIT, Cambridge MA 1984-1986
- Governors' Prize in Computing Science. Imperial College. London UK. 1984
- IBM Prize in Computing Science. Imperial College. London UK. 1984
- Arthur Anderson Prize in Computing Science. Imperial College. London UK. 1983