

Curriculum Vitae

Krishnaprasad Thirunarayan (T. K. Prasad)

Metadata and Languages Laboratory, Knoesis Center
Department of Computer Science and Engineering
Wright State University, Dayton, OH 45435

Date of appointment to present rank of Associate Professor at Wright State University:
September 1995.

Education

<u>Institution</u>	<u>Concentration</u>	<u>Degree</u>	<u>Date</u>
State Univ of New York at Stony Brook	Computer Science	Ph.D.	1989
Indian Inst. of Science at Bangalore	Computer Science	M.E.	1984
Indian Inst. of Technology at Madras	Electrical Engr.	B. Tech.	1982

Academic and Professional Experience

<u>Institution</u>	<u>Position</u>	<u>Dates</u>
Wright State Univ	Associate Professor with Tenure	1995 – present
Sensors Directorate, WPAFB	Visiting Reseach Faculty	2007
Cohesia Corporation	Consultant	1999 – 2002
Wright State Univ	Assistant Professor	1989 – 1995
Microelectronics Division, WPAFB	Summer Reseach Faculty	1994, 1995, 1997
SUNY at Stony Brook	Graduate Assistant	1984 – 1989

Journal Articles

- K. Thirunarayan, and T. Immaneni, Hybrid Retrieval of Hypertext Web Documents and Semantic Web Data. (Under Review)
- K. Thirunarayan, and T. Immaneni: A Coherent Query Language for XML, *Journal of Intelligent Information Systems*, Available online since: March 2008.
- K. Cleereman, M. Cheatham, and K. Thirunarayan: Mechanisms for Improved Covariant Type-Checking, *Journal of Computer Languages, Systems and Structures*, Vol. 1, pp. 1-17, April 2008.
- K. Thirunarayan, and T. Immaneni: An XML-Based Approach to Handling Tables in Documents, *Journal of Intelligent Systems*, Vol. 17(1-3), pp. 215-228, 2008.

- K. Thirunarayan: On Embedding Machine-Processable Semantics into Documents, *IEEE Transactions of Knowledge and Data Engineering*, Vol. 17, No. 7, pp. 1014-1018, July 2005.
- K. Thirunarayan, A. Berkovich, and D. Sokol: An Information Extraction Approach to Reorganizing and Summarizing Specifications, In: *Information and Software Technology Journal*, Vol. 47, Issue 4, pp. 215-232, 2005.
- K. Thirunarayan, G. Kniesel, and H. Hampapuram, Simulating Multiple Inheritance and Generics in Java, In : *Computer Languages*, Vol. 25(4), pp. 189-210, 2001.
- K. Thirunarayan and R. L. Ewing, Structural Operational Semantics for a Portable Subset of Behavioral VHDL-93, In : *Formal Methods in System Design*, Vol. 18, pp. 69-88, 2001.
- K. Thirunarayan, On the Relationship between Annotated Logic Programs and Nonmonotonic Formalisms, In: *Journal of Experimental and Theoretical Artificial Intelligence*, Vol. 7, pp. 391-406, Dec 1995.
- K. Thirunarayan, On the Equivalence of Upward and Downward Inheritance Reasoners, In: *Annals of Mathematics and Artificial Intelligence*, Vol. 15(2), pp. 239-256, Nov 1995.
- K. Thirunarayan, Local Theories of Inheritance, In: *International Journal of Intelligent Systems*, Vol. 10(7), pp. 617-645, Jul 1995.
- K. Thirunarayan, Locality in Inheritance Networks, In: *Information Processing Letters*, Vol. 46(6), pp. 263-268, Jul 1993.
- K. Thirunarayan and Michael Kifer, A Theory of Nonmonotonic Inheritance Based on Annotated Logic, *Artificial Intelligence Journal*, Vol. 60, pp. 23-50, Mar 1993.
(The abstract of the above paper also appears in *Zentralblatt für Mathematik*.)
- R. Ramesh, R. Verma, K. Thirunarayan and I.V. Ramakrishnan, Term Matching on Parallel Computers, In *Journal of Logic Programming*, Vol. 6, pp. 213-228, May 1989.
- K. Thirunarayan, On the Computability of Circumscription, In *Information Processing Letters*, Vol. 27, pp. 237-243, April 1988.

Edited Books

- Amit Sheth, Steffen Staab, Mike Dean, Massimo Paolucci, Diana Maynard, Timothy Finin and Krishnaprasad Thirunarayan: *Proceedings of The Semantic Web - ISWC 2008, 7th International Semantic Web Conference*, Karlsruhe, LNCS 5318, Springer-Verlag (Heidelberg), October 2008.

Book Chapters

- K. Thirunarayan, Attribute Grammars and their Applications, In: *Encyclopedia of Information Science and Technology*, Second Edition, Editor: Mehdi Khosrow-Pour, Information Science Publishing, 2008. (to appear)
- K. Thirunarayan, Inheritance in Programming Languages, In: *Encyclopedia of Information Science and Technology*, Second Edition, Editor: Mehdi Khosrow-Pour, Information Science Publishing, 2008. (to appear)
- Laks V.S. Lakshmanan and K. Thirunarayan, Declarative Frameworks for Inheritance, In *Logics for Databases and Information Systems*, Eds: J. Chomicki and G. Saake, Kluwer Academic Publishers, pp. 357-388, 1998.

Conference Papers

- K. Thirunarayan and R. M. Verma, A Framework for Trust and Distrust Network, In: *Proceedings of Web 2.0 Trust Workshop* (co-located with: IFIPTM 2008 - Conference on Privacy, Trust Management and Security), June 2008, Trondheim, Norway.
- K. Thirunarayan, T. Immaneni, and M. Shaik, Dependence of Binary Associations on Co-occurrence Granularity in News Documents, In: *Proceedings of The 2008 International Conference on Information and Knowledge Engineering* (IKE-08), pp. 193-198, July 2008.
- K. Thirunarayan, T. Immaneni, and M. Shaik, Selecting Labels for News Document Clusters, In: *Proceedings of 12th International Conference on Applications of Natural Language to Information Systems* (NLDB-2007), LNCS 4592, pp. 119-130, June 2007.
- K. Cleereman, M. Cheatham, and K. Thirunarayan, Runtime Support of Speculative Optimization for Offline Escape Analysis, In: *Proceedings of the International Conference on Software Engineering Research and Practice* (SERP'07), pp. 484-489, June 2007.
- T. Immaneni and K. Thirunarayan, A Unified approach To Retrieving Web Documents and Semantic Web Data, In: *Proceedings of the 4th European Semantic Web Conference* (ESWC-2007), LNCS 4519, pp. 579-593, June 2007.
- T. Immaneni, and K. Thirunarayan, Hybrid Retrieval from the Unified Web, In: *Proceedings of the 22nd Annual ACM Symposium on Applied Computing* (ACM-SAC-SWAP), pp. 1376-1380, March 2007.
- K. Thirunarayan, and T. Immaneni, Flexible Querying of XML Documents, In: *Proceedings of the 16th International Symposium on Methodologies for Intelligent Systems* (ISMIS-2006), LNAI, Vol. 4203, pp. 198-207, September 2006.

- K. Thirunarayan, and T. Immaneni, Formalizing and Querying Heterogeneous Documents with Tables, In: *Proceedings of the The 2nd Indian International Conference on Artificial Intelligence (IICAI-05)*, pp. 769-778, December 2005.
- D. Ravishankar, K. Thirunarayan, and T. Immaneni, A Modular Approach to Document Indexing and Semantic Search, In: *Proceedings of the IASTED International Conference on Web Technologies, Applications and Services*, pp. 165 -170, July 2005.
- K. Thirunarayan, On Embedding Machine-Processable Semantics into Documents, In *Proceedings of 9th International Conference on Applications of Natural Language to Information Systems (NLDB-2004)*, LNCS Vol. 3136, pp. 368-373, June 2004.
- K. Thirunarayan, and S. P. Carl, Toward a Comprehensive Supplement for Language Courses, In *Proceedings of International Symposium on Information Systems and Engineering (ISE-2003)*, pp. 174-179, July 2003.
- K. Thirunarayan, A. Berkovich, S. Grace, and D. Sokol, Information Extraction for Reorganizing Specifications, In *Proceedings of 8th International Conference on Applications of Natural Language to Information Systems (NLDB-2003)*, LNI, Vol. P-29, pp. 242-248, June 2003.
- K. Thirunarayan, Applying XML/XSLT Technology : A Case Study, In *Proceedings of International Symposium on Information Systems and Engineering (ISE-2002)*, Simulation Series Vol 34(2), pp. 73-78, 2002.
- K. Thirunarayan, A. Berkovich, and D. Sokol, Semi-automatic Content Extraction from Specifications, In *Proceedings of 7th International Conference on Applications of Natural Language to Information Systems (NLDB-2002)*, LNCS 2553, Springer-Verlag, pp. 40-51, June 2002.
- Chris Kinzig, K. Thirunarayan, G. B. Lamont, and R. E. Marmelstein, Summarizing Data Sets for Classification, In *Proceedings of International Conference on Artificial Intelligence (ICAI-2001)*, pp.681-687, May 2001.
- R. Ewing, G.Lamont, C. Brothers, M.Oxley, F. Beyette, Jr., J. Boyd, H. Carter, C. Purdy, H. Abdel-Aty-Zohdy, S. Bibyk, Y. Zheng, and K. Thirunarayan, In: *An Interactive Video Course in Multidisciplinary and Collaborative Design for Systems on a Chip*, 2001 Intl. Conf. on Microelectronics Systems Education (MSE'01), pp. 87-88, 2001.
- K. Thirunarayan, Collaborative Environments in Java, *Proceedings of the Collaborative Technologies Workshop*, pp. 69-71, November 1999.
- Laura DeBrock and K. Thirunarayan, A VHDL Hardware Description Browser, In *Proceedings of Florida AI Research Symposium (FLAIRS-97)*, pp. 145-149, May 1997.

- K. Thirunarayan and Robert L. Ewing, Characterizing a portable subset of behavioral VHDL-93, In *Proceedings of Computer Hardware Description Languages (CHDL-97)*, Chapman and Hall, pp. 97-113, April 1997.
- K. Thirunarayan and Robert L. Ewing, On the portability of behavioral VHDL-93, In *Proceedings of VIUF Fall 96 Conference*, pp. 251-260, October 1996.
- Robert Eastham and K. Thirunarayan, Proof Strategies for Hardware Verification, In *Proceedings of National Aerospace and Electronics Conference (NAECON)*, pp. 451-458, 1996.
- K. Thirunarayan, A Meta-Interpreter for Circuit-Extraction, In *Proceedings of National Aerospace and Electronics Conference (NAECON)*, pp. 680-684, 1995.
- K. Thirunarayan, Abduction in Annotated Logic Programming, In: *Proceedings of IEEE International Conference on Systems, Man, and Cybernetics*, pp. 682-687, October 1992.
- K. Thirunarayan, An Analysis of Property Flow View vs Individual Flow View of Inheritance, In: *Proceedings of the Sixth International Symposium on Methodologies for Intelligent Systems, ISMIS-91*, Lecture Notes in Artificial Intelligence, Vol. 542, Springer Verlag, pp. 256-265, October 1991.
- K. Thirunarayan and V. Dasigi, On the Relationship between Abductive Reasoning and Boolean Minimization. In: *Proceedings of AAAI 91 Workshop: Towards Domain Independent Strategies for Abduction*, pp. 84-88, July 1991.
- K. Thirunarayan, M. Kifer and D.S. Warren, On the Declarative Semantics of Inheritance Networks, In *Proceedings of the Eleventh International Joint Conference on Artificial Intelligence (IJCAI-89)*, Morgan-Kaufmann, pp. 1093-1098, August 1989.
- K. Thirunarayan and M. Kifer, An Evidence-based Framework for a Theory of Inheritance, In *Proceedings of the Eleventh International Joint Conference on Artificial Intelligence (IJCAI-89)*, Morgan-Kaufmann, pp. 1099-1103, August 1989.
- K. Thirunarayan, M. Kifer and D.S. Warren, On the Circumscriptive Semantics of Inheritance Networks, In *Proceedings of the Fourth International Symposium on Methodologies for Intelligent Systems (ISMIS-89)*, North-Holland, pp. 448-457, October 1989.
- R. Ramesh, R. Verma, K. Thirunarayan and I.V. Ramakrishnan, Term Matching on Parallel Computers, In *Proceedings of the Fourteenth International Colloquium on Automata, Languages and Programming (ICALP-87)*, Lecture Notes in Computer Science, Vol. 267, Springer Verlag, pp. 336-346, July 1987.
- R. Verma, K. Thirunarayan and I.V. Ramakrishnan, An Efficient Parallel Algorithm for Term Matching, In *Proceedings of the Sixth International Conference on Foundations*

of Software Technology and Theoretical Computer Science (FST-TCS), Lecture Notes in Computer Science, Vol. 241, Springer Verlag, pp. 504-518, December 1986.

T. Krishnaprasad, Y.N. Srikant, and Priti Shankar, An Attribute Grammar-Based Compiler Generator, In *Proc. Computer Society of India*, Annual Convention, 1985.

Grants and Contracts

Spatio-Temporal-Thematic Queries of Semantic Web Data: A Study of Expressivity and Efficiency, \$120K, 2008-2010. NSF. *PI*: A. P. Sheth, *co-PI*: K. Thirunarayan.

Trusted Semantic Sensor Web, \$126K, 2008. AFRL/SAIC. *PI*: A. P. Sheth, *co-PIs*: K. Thirunarayan and B. Wang.

AFRL-DAGSI Ohio Student Faculty Graduate Fellowship Program. *PI*: K. Thirunarayan (with Joshua K. Pschorr), \$57,767, 2008-2009.

Travel Grant for attending NSF Workshop *Teach Scheme - Reach Java*, \$1000, 2007.

Travel Grant for attending *European Semantic Web Conference*, \$1000, 2007.

Metadata for Timelining Events, \$15K, daytaOhio-LexisNexis, 2007. *PI*: K. Thirunarayan. *Grant Number/Account Number* : WSU#6-66496

Metadata for Timelining Events, \$78,724, WCI-daytaOhio-LexisNexis, 2006. *PI*: K. Thirunarayan. *Grant Number/Account Number* : WSU#6-66496 (Plus, \$25K for equipment from daytaOhio)

Information Extraction from Semi-Structured Documents, \$39K, AFRL-WBI (SKM), 2004-2005. *PI*: K. Thirunarayan. *Grant Number/Account Number* : WSU#6-65785

Information Extraction from Semi-Structured Documents, \$65K, AFRL-WBI (SKM), 2003-2004. *PI*: K. Thirunarayan. *Grant Number/Account Number* : WSU#6-65487

Computer-Assisted Document Interpretation Tools, \$25K, NSF SBIR Phase IIB with Cohesia Corporation, 2002. *WSU-PI*: K. Thirunarayan. *Grant Number/Account Number* : DMI-0078525/WSU#6-65304

Computer-Assisted Document Interpretation Tools, \$75K, NSF SBIR Phase II with Cohesia Corporation, 2000-2002. *WSU-PI*: K. Thirunarayan. *Grant Number/Account Number* : DMI-0078525/WSU#6-64641

Mixed-Signal Modelling for System Level Simulation, \$50K, AFRL/DAGSI, 2001-2003. *WSU-PI*: K. Thirunarayan. *Proposal Number/Account Number* : WSU#01-279-10/WSU#6-65006

Advanced Global Information Methodology for Improved C4ISR System Integration, \$53K, AFRL/DAGSI, 1999. *WSU-PI*: K. Thirunarayan. *Account Number* : WSU#99-396-10/WSU#6-64099

Computer-Assisted Document Interpretation Tools, \$21K, NSF SBIR Phase I with Renaissance Engineering, 1999. *WSU-PI*: K. Thirunarayan. *Grant Number/Account Number* : DMI-9860316/WSU#6-64001

Java interface to a VHDL/VHDL-AMS parser, \$17K, WPAFB contract, 1997. *PI*: K. Thirunarayan.

Microsoft Instructional Lab Grant for software licenses valued at \$48,207. The software includes copies of Visual J++, Microsoft Office 97 Professional and Windows NT. (Co-Is: P. Bergstein, P. Mateti, K. Meyer, and S. Narayanan.)

Microsoft Instructional Lab Grant for software licenses valued at \$19,450. The software includes 50 copies each of Visual C++, Microsoft Office Professional and Windows 95. (with: S. Narayanan and K. Meyer.)

VHDL-93 Parser in SWI-Prolog: A Basis for Design Query System, \$25K, Air Force Office of Scientific Research (AFOSR), 1995. *PI*: K. Thirunarayan. *Proposal/Account Number* : WSU#95-102-10/WSU#662800 (The parser conforms to IEEE 1076-1993 Standard of VHDL.)

Implementation of an Efficient Inheritance Reasoner, Research Initiation Award of \$51K, National Science Foundation (NSF), 1990-92. *Program*: Knowledge Models and Cognitive Systems. *PI*: K. Thirunarayan. *Grant Number*: IRI-9009587

The Design and Implementation of an Inheritance Reasoner, Research Challenge Award of \$20K, The State of Ohio, 1989-91. *PI*: K. Thirunarayan. *Account Number* : WSU#660818

Teaching

- CS340 Programming Language Workshop in Java (1 credit)
- CS340 Programming Language Workshop in C# (1 credit)
- CS340 Programming Language Workshop in Python (1 credit)
- CS466/666 Formal Languages and Automata
- CS480/680 Comparative Languages
- CS499 Introduction to Information Retrieval
- CS774 Logic Programming

- CS776 Functional Programming
- CS780 Compiler Design and Construction I
- CS781 Compiler Design and Construction II
- CS784 Programming Languages
- CS707 Information Retrieval
- CS884 Advanced Topics in Programming Languages
- CEG 860 Object-Oriented Programming
- CEG 790 Collaborative Design of a System-on-a-Chip
- CS/CEG 891 Knowledge Representation and Reasoning : Linear Algebra Applications
- CS 891 Information Retrieval, Extraction and Management
- CS799 Special topics in AI: Knowledge Representation and Reasoning
- Java : Platform Independent Software Technology
- *Also taught:* CS141, CS142, CS240, CS241, CS242, etc

Online Material URL

<http://www.cs.wright.edu/~tkprasad>

Doctoral Students with Dissertion Title

- Stephen P. Carl: “*A Framework for Experimentation in Memory Management Systems*”. (<http://scarl.sewanee.edu/>)
- Trivikram Immaneni: “*A Hybrid Approach to Retrieving Web Documents and Semantic Web Data*”. (<http://technorati.com>)
- Kevin Cleereman: “*Programming language support for safe memory management.* (WPAFB-AFRL: Sensors Directorate) (In progress)

Masters' Students with Thesis Title

- Joshua Pschorr: “*Semantic Sensor Web*”. (In progress)
- Dharan Althuru: “*Trust and Distrust Networks*”. (In progress)
- Mastan Vali Shaik: “*Design and Implementation of Timeline Application for News Documents*”.
- Venkatakalyan Potturi: “*Implementation for a Coherent Keyword-Based XML Query Language*”.
- Sylvia George: “*Word Correlation Assistant for Query Refinement*”.
- Dhanya Ravishankar: “*Document Indexing and Semantic Search*”.
- Nalini Pitchika: “*Issues and Techniques for Information Management*”.
- Vijayasree Jonnalagadda: “*Extraction of Tabular Data from Heterogeneous Documents*”.
- Jun Lu: “*Dependency Analysis and VHDL-AMS Programs Partitioning*”.
- Prasanna Soundarapandian: “*Information Extraction for Reorganizing Specifications*”.
- Chris Kinzig: “*Summarizing Data using Compact Decision Rule sets*”.
- Tianrong Hu: “*Java-based VHDL-AMS Browser*”.
- Laura DeBrock: “*A VHDL-93 Hardware Description Browser*”.
- Robert Eastham: “*Proof Strategies for Digital Circuit Verification*”.
- Mallikarjuna Mitnala: “*A Language for Temporal Reasoning*”.
- Zhengjun Guo: “*Object-Oriented Database: A Survey and an X-Window Based Interface*”.
- Yaqiong Zhang: “*Expressive Nonmonotonic Inheritance Networks*”.
- Xixi Yang: “*Integrating Deductive and Abductive Reasoning*”.
- Ross Rannells: “*Abduction: A Survey and a Prolog Interpreter*”.
- Heather Kolano: “*Expression Parsing and Code Generation*”. (Recent Undergraduate Honors Student)

Professional Membership

<u>Association</u>	<u>Status</u>	<u>Dates</u>
American Association for Artificial Intelligence (AAAI)	Member	1989 – 2003
Association for Computing Machinery (ACM + SIGPLAN)	Member	1990 – present
IEEE and IEEE Computer Society	Member	1992 – present

Professional Service

Referee for Research Proposals for the *NSF*.

Reviewer for:

- Symposium of Logic Programming
- Conference on the Principles of Database Systems
- North American Conference on Logic Programming
- International Conference on Logic Programming
- Florida AI Research Society Conference
- IEEE Symposium on Collaborative Technologies
- Foundations of Software Technology and Theoretical Computer Science
- Computer and Mathematics with Applications
- IEEE International Conference on Tools with Artificial Intelligence
- International Conference on Information Systems and Engineering
- Indian International Conference on AI
- Annual ACM Southeast Conference,
- Intl. Conf. on Industrial and Engineering Applications of AI and Expert Systems
- Journal of Logic Programming
- IEEE Transactions on Systems, Man, and Cybernetics
- International Journal on Artificial Intelligence Tools
- International Journal of Computers and their Applications
- Journal of Intelligent Systems (Special Issue: Web-based IR)
- International Journal of Pattern Recognition and Artificial Intelligence
- IEEE Concurrency
- IEEE Software
- IEEE Computer

- Journal of Data and Knowledge Engineering
- International Journal of Intelligent Information and Database Systems
- Journal of Applied Intelligence

Session Organizer for a special track on

- “Semantic Web” at Indian International Conference on Artificial Intelligence, 2005.
- “Semantic Web and Information Retrieval” at Indian International Conference on Artificial Intelligence, 2007.

Session Chair for

- “Software Engineering” at the IEEE National Aerospace and Electronics Conference.
- “Web Services and Service-based Approaches” at the International Conference on Information Systems and Engineering,
- “Intelligent Querying” at International Conference on Applications of Natural Language to Information Systems.
- “Semantic Web” at Indian International Conference on Artificial Intelligence.
- “Information Management + Retrieval + Databases” at Information and Knowledge Engineering Conference.

Program Committee Member for:

- Florida AI Research Society Conference
- International Conference on Information Systems and Engineering
- Indian International Conference on AI (Also, on Best Paper Award Committee.)
- Canadian Semantic Web Working Symposium.
- Intl Conf. on Applications of Natural Language to Information Systems.
- International Workshop on Ontologies and Information Systems for the Semantic Web.
- Conference on Information and Knowledge Management.

Proceedings Chair and Co-Editor of:

- *The Semantic Web - ISWC 2008, 7th International Semantic Web Conference*, LNCS 5318, Springer-Verlag (Heidelberg), October 2008.

Book Reviewer:

- in the area of *Programming Languages and Compilers* for Morgan Kaufmann, John Wiley, McGraw Hill, Addison-Wesley, Prentice Hall, Taylor and Francis Publishers, etc.
- in the area of *Databases* for Addison Wesley.

Invited Talks titled:

- “An Introduction to Model Theory for Knowledge Representers” (1990), at the Indian Institute of Science, Bangalore, India.
- “The Semantics of Programming Languages” (1991), at the Indian Institute of Science, Bangalore, India.
- “Information Extraction from Semi-Structured Documents” (2004), at the Indian Institute of Science, Bangalore, India.
- “Paradoxes: The Seeds of Progress” at the ACM Student Chapter Meeting at the Wright State University, Dayton, Ohio in 1990.

Invited Talk titled:

Chaired

1. University IT Committee for one year.
2. College Steering Committee for one year.
3. Departmental Colloquium Committee for three years.
4. Languages and Software Area Committee for three years.
5. Department Graduate Studies Committee for one year.

Have served on:

University Committees: Library, Honors, Admissions, Petitions, Information Technology, Classroom of the Future, Membership, Buildings and Grounds.

College Committees: Faculty Development, Steering, Graduate Studies, Due Process, Curriculum, Library, Petitions.

Department Committees: Admissions, Graduate Studies, Undergraduate, Ph.D., Colloquium, CSE Website/Content Management Task Force.

Served as a Judge for 1989 ACM East-Central Programming Contest. I also contributed problems to 1991 ACM East-Central Programming Contest Trials held at Wright State University.

Selected Distinctions

Secured *first rank* in Central School, Vadodara in All India Higher Secondary School Examination (CBSE).

Secured *second rank* in my Bachelor of Technology (in Electrical Engineering) class at the Indian Institute of Technology, Madras.

Secured *first rank* in my Master of Engineering (in Computer Science) class at the Indian Institute of Science, Bangalore.

Adv. GRE (Engr.) Score (1982) = **920**. Adv. GRE (CS) Score (1984) = **920**.
(99th percentile started at **840** for both Subject Areas.)

Awarded American Association of Artificial Intelligence Scholarship for presenting two papers at the *Eleventh International Joint Conference on Artificial Intelligence (IJCAI-89)*, at Detroit, Michigan. Also Invited to participate (awarded Honorarium) for *Workshop for Defeasible Reasoning with Multiple Inheritance and Specificity*, at St. Louis, Missouri.

The work on *circumscription* has been cited in papers appearing in the Journal of the ACM (by Kolaitis and Papadimitriou), the Journal of Logic Programming, the Proceedings of the AAAI, etc and in books on Nonmonotonic Reasoning. The work on *Parallel Term Matching* has been cited in papers in the SIAM Journal of Computing (by Dwork, Kanellakis and Stockmeyer). The work on *Inheritance* has been cited in papers appearing in the Artificial Intelligence Journal, the Proceedings of AAAI and IJCAI, the Journal of Computer and Systems Science, the Handbook of Logic Programming and Artificial Intelligence (by Horty) etc, and in the ACM Award Winning Doctoral Dissertation (by Geffner).

The work on *Abduction in Logic Programming* referenced in US Patent number: “5812994” and titled “Apparatus and method for data processing and/or for control” from Canon (Sept. 22, 1998).

Google search on “Comparative Languages” yields my *CS480/CS680 Comparative Languages* course web page at rank 1 (first hit on first page as of August 20, 2008).

Google search on “Attribute Grammars” yields my lecture on the first page. (It was at *rank 2* as of April 2008 (second entry on the first page following the Wikipedia article)).

<http://www.cs.wright.edu/~tkprasad/courses/cs784/L167AG.ppt>

Winner of *Achievement and Service Award* at Indian International Conference on Artificial Intelligence, 2005 and 2007.

Winner of *Recognition for Outstanding Service to Children* by YGIC Parent Forum, 2008.

Winner of 2007-2008 College of Engineering and Computer Science *Outstanding Faculty Award*.

Other Selected Service

The *Compiler Generator based on Attributed Translation Grammar* (which also automates Wirth's scheme of error recovery) written as a part of my Master's Thesis has been used as a tool in Compiler Construction classes at the Indian Institute of Science, Bangalore.

The *IEEE 1076.1 Standard of VHDL Design Browser* with parser in SWI-Prolog and GUI in Java 1.1 that runs on UNIX and Windows95, and the older *VHDL-93 Hardware Description Browser* in SWI-Prolog and Tcl/TK are publically available from my home page

<http://www.cs.wright.edu/~tkprasad/selectedprojects.html>

Functional Programming Notes (especially lectures on Recursive Definitions involving Combinatorial Functions and ADT specs) shared on PLT-Scheme listserv.

<http://www.cs.wright.edu/~tkprasad/courses/cs776/cs776.html>

<http://www.cs.wright.edu/~tkprasad/courses/cs784/cs784.html>

Currently teaching *Vedic Mathematics for Kids* on behalf of Youth Group for Indian Culture (YGIC).

<http://www.cs.wright.edu/~tkprasad/assortedbookmarks.html>

Developing informal lectures on Logic too.