

GIRISH SURYANARAYANA

Graduate Student Researcher
Department of Informatics
School of Information and Computer Science
University of California Irvine
Irvine, CA 92697-3440

Phone: +1-949-295-6507
Fax: +1-949-824-1715
sgirish@ics.uci.edu
<http://www.ics.uci.edu/~sgirish>

EDUCATION

- 06/2001 - present **Doctor of Philosophy in Computer Science (expected 2007)**
University of California, Irvine
Dissertation Title: *Selection and Architecture-based Composition of Trust Models in Decentralized Applications*
- 09/1999 - 06/2001 **M.S. in Information and Computer Science**
University of California, Irvine
- 08/1995 - 06/1999 **B.E. in Electrical and Electronics Engineering**
Birla Institute of Technology and Science (BITS)
Pilani, Rajasthan, India

PROFESSIONAL EXPERIENCE

- 01/2003 - Present Graduate Student Researcher, Donald Bren School of Information and Computer Sciences, University of California, Irvine
- 06/2002 - 09/2002 Intern, Endeavors Technology Inc., Irvine, California
- 09/1999 - 12/2002 Teaching Assistant, Donald Bren School of Information and Computer Sciences, University of California, Irvine
- 01/1999 - 06/1999 Intern, Honeywell India Software Operations Pvt. Ltd., Bangalore, India
- 05/1996 - 07/1996 Intern, VIP Industries Ltd., Nagpur, India

FELLOWSHIPS AND GRANTS

- 2006 Donald Bren School of Information and Computer Sciences 2005-06 Dissertation Award
- 2005 "A Software Architecture Approach for Decentralized Reputation Management," National Science Foundation (NSF) Cyber Trust, Grant No. 0524033, award amount \$455,000 for 3 years
- Major contributor in writing this grant proposal
 - Proposal primarily focused on my research

- 2003 Donald Bren School of Information and Computer Sciences Summer Scholarship for Outstanding Students, University of California, Irvine
- 1999 Donald Bren School of Information and Computer Sciences Fellowship, University of California, Irvine
- 1993 One among 700 students all over India to be awarded the National Talent Search (NTS) fellowship by the National Council of Educational Research and Training (NCERT), India

PUBLICATIONS

Refereed Journal Publications

- J-1 Suryanarayana, G., Diallo M., Erenkrantz, J., and Taylor, R.N., "Architecting Trust-enabled Peer-to-Peer File-sharing Applications," *ACM Crossroads, issue on Software Engineering*, Vol. 12, No. 4, Summer 2006.
- J-2 Suryanarayana, G., Erenkrantz, J., and Taylor, R.N., "An Architectural Approach for Decentralized Trust Management," *IEEE Internet Computing special issue on Ad Hoc and P2P Security*, Vol. 9, No. 6, pp. 16-23, November/December 2005.

Refereed Conference Publications

- C-1 Suryanarayana, G., Diallo M., Erenkrantz, J., and Taylor, R.N., "Architectural Support for Trust Models in Decentralized Applications," in *Proceedings of the 28th International Conference on Software Engineering*, Shanghai, China, May 2006. *Acceptance ratio: 36/395*.
- C-2 Suryanarayana, G., Erenkrantz, J., Hendrickson, S., and Taylor, R.N., "PACE: An Architectural Style for Trust Management in Decentralized Applications," in *Proceedings of the Fourth Working IEEE/IFIP Conference on Software Architecture*, Oslo, Norway, June 2004. *Acceptance ratio: 25/82*.
- C-3 Suryanarayana, G., and Taylor, R.N., "A Decentralized Algorithm for Coordinating Independent Peers: An Initial Examination," in *Proceedings of the Tenth International Conference on Cooperative Information Systems (CoopIS)*, Irvine, California, October 2002. *Acceptance ratio: 29/116*.

Under Preparation

- P-1 Suryanarayana, G., Erenkrantz, J., Diallo, M., and Taylor, R.N., "Architecting Trust-centric Decentralized Applications", to be submitted to *IEEE Transactions on Software Engineering*.
- P-2 Suryanarayana, G., Diallo, M., and Taylor, R.N., "A Generic Framework for Modeling Decentralized Reputation-based Trust Models".
- P-3 Suryanarayana, G. and Taylor, R.N., "SIFT: A Simulation Platform for Evaluating Decentralized Reputation Models".
- P-4 Erenkrantz, J., Gorlick, M., Suryanarayana, G., and Taylor, R.N., "Harmonizing Architectural Dissonance in REST-based Architectures", to be submitted to *IEEE Transactions on Software Engineering*.

Technical Reports and Demonstration Papers

- T-1 Diallo M., Suryanarayana, G., and Taylor, R.N., “Tool Support for Incorporating Trust Models into Decentralized Applications,” ISR Technical Report UCI-ISR-06-4, April 2006 (12 pages).
- T-2 Suryanarayana, G., and Taylor, R.N., “TREF: A Threat-centric Comparison Framework for Decentralized Reputation Models,” ISR Technical Report UCI-ISR-06-2, January 2006 (15 pages).
- T-3 Suryanarayana, G., and Taylor, R.N., “A Survey of Trust Management and Resource Discovery Technologies in Peer-to-Peer Applications,” ISR Technical Report UCI-ISR-04-6, July 2004 (59 pages).
- T-4 Suryanarayana, G., Erenkrantz, J., Hendrickson, S., and Taylor, R.N., “PACE: An Architectural Style for Trust Management in Decentralized Applications,” ISR Technical Report UCI-ISR-03-9, September 2003 (10 pages).
- D-1 Dashofy, E., Asuncion, H., Hendrickson, S., Suryanarayana, G., Georgas, J. and Taylor, R.N., “ArchStudio 4: An Architecture-based Meta-modeling Environment,” accepted at the *29th International Conference on Software Engineering, Informal Research Demonstrations, 2007*.

PROFESSIONAL SERVICE AND ACTIVITIES

1. Technical Program Committee member for the *International Conference on Software Engineering Advances (ICSEA)*, 2006.
2. Technical Program Committee member for the “Trust, Recommendations, Evidence and other Collaboration Know-how (TRECK) track” of the *21st Annual ACM Symposium on Applied Computing (SAC)*, 2006.
3. Technical Program Committee member for the *Institute for Software Research (ISR) Graduate Student Research Forum*, 2005.

TEACHING

Teaching Assistant (University of California, Irvine)

- | | |
|------------------------|--|
| Fall 2003 | ICS 125 “Project in Software System Design”
Guided students as they specified, designed, implemented, and tested a real-world software project with special emphasis on teamwork and project planning. |
| 2001-2002
Fall 2002 | ICS 52 “Introduction to Software Engineering”
(Served as a Teaching Assistant for this class for four quarters)
Assisted and guided students as they gained a hands-on experience of the different phases of the software life-cycle in the context of a software project. |
| Spring 2000 | ICS 141 “Programming Languages”
Helped students understand the basics of different programming paradigms. |
| Winter 2000 | ICS 121 “Software Tools and Methods”
Helped familiarize students to new types of software tools and techniques. |

Fall 1999 ICS 123 “Software Architectures, Distributed Systems, and Interoperability”
Introduced students to new architectural styles, ways of building concurrent distributed systems, and state-of-the-art interoperability techniques and tools.

Teaching Assistant (Birla Institute of Technology and Science, Pilani)

Fall 1998 EMEC “Electro-mechanical Energy Conversion”
Revised lecture material and helped students with homework assignments at discussion sessions for this Electrical Engineering course.

STUDENTS SUPERVISED

2003 - 2006 Mamadou H. Diallo (*Ronald E. McNair Postbaccalaureate Achievement Program Scholar*)
B.S., Information and Computer Science, University of California Irvine, 2004
M.S., Information and Computer Science, University of California Irvine, 2006

2003 Vadim Bichutski
B.S., Information and Computer Science, University of California Irvine, 2004

RESEARCH TALKS

11/01/2002 “A Decentralized Algorithm for Coordinating Independent Peers: An Initial Examination” at *Cooperative Information Systems, 2002*

PROFESSIONAL MEMBERSHIPS

- Association for Computing Machinery (ACM)
- Institute of Electrical and Electronics Engineers (IEEE) Computer Society

REFERENCES

1. **Richard N. Taylor**

Address	Donald Bren School of Information and Computer Sciences Department of Informatics University of California Irvine Irvine, California 92697-3440
Phone	+1-949-824-6429
Fax	+1-949-824-1715
Email	taylor@ics.uci.edu

2. **Andre van der Hoek**

Address Donald Bren School of Information and Computer Sciences
Department of Informatics
University of California Irvine
Irvine, California 92697-3440
Phone +1-949-824-6326
Fax +1-949-824-1715
Email andre@ics.uci.edu

3. **Thomas Alspaugh**

Address Donald Bren School of Information and Computer Sciences
Department of Informatics
University of California Irvine
Irvine, California 92697-3440
Phone +1-949-824-7355
Fax +1-949-824-1715
Email alspaugh@ics.uci.edu