

Curriculum Vitae  
**Sriram Subramanian**

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The Netherlands.  
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Email: [sriramable@gmail.com](mailto:sriramable@gmail.com)
- Date of Birth:** 16-January-1976
- Nationality:** Indian (Permanent Resident of Canada)
- Current Employment:** Dec 2006 –  
Senior Research Scientist,  
(equivalent to a tenured faculty position),  
Media Interaction Group,  
Philips Research,  
The Netherlands.
- Past Employment:** July 2003 – Jan 2007  
Assistant Professor,  
Computer Science Department,  
University of Saskatchewan,  
Canada.
- Visiting Position:** January– April 2006  
Visiting Professor,  
Graduate School of Information Science and Technology,  
Osaka University, Japan.
- Credentials:**
- Aug 1999 - April 2004 **PhD Human-Computer Interaction**  
Title: *Tangible Interfaces for Volume Navigation*  
Promoter: Prof. Dr. Matthias Rauterberg  
Technische Universiteit Eindhoven ,  
The Netherlands.
- Aug 1995 – June 1999 **Master of Engineering–Electrical Communication Engineering**  
Department of Electrical Communication Engineering,  
Indian Institute of Science,  
Bangalore,  
India.
- July 1992 – June 1995 **Bachelor of Science – Physics**  
Department of Physics,  
Loyola College (Madras University),  
Chennai,  
India.
- Research Expertise:**
- Human-Computer Interaction
  - Interactive Media, Augmented and Virtual Reality
  - Mobile Devices
  - Designing for fun and entertainment
  - Pen input and tabletop interfaces
  - Computer Vision & Image Processing

## Research Contribution:

### Fully Refereed Publications

1. *Raghavendra Kattinakere; Tovi Grossman; and Sriram Subramanian*, “Modeling Navigation within Above-the-Surface Interaction Layers”, in ACM CHI - Human-Factors in Computing Systems 2007 (Acceptance Rate = 24%).
2. *Jared Cechanowicz; Pourang Irani; and Sriram Subramanian*, “Augmenting the Mouse with Pressure Sensitive Input”, in ACM CHI - Human-Factors in computing systems 2007 (Acceptance Rate = 24%).
3. *Carrie Demmans, Sriram Subramanian; and Jon Titus*, “Posture Monitoring and Improvement for Laptop Use”, in Extended Abstracts of ACM CHI - Human-Factors in computing systems 2007 (accepted).
4. *Jinzi Mao; David Mould; and Sriram Subramanian*, “Background Subtraction for real-time tracking of a tennis ball”, in Conference on Computer Vision Theory and Applications 2007 (accepted).
5. *Dzmitry Aliakseyeu; Sriram Subramanian; and Andrés Lucero*, “Interacting with Piles of Artifacts on a Digital Table”, accepted for Journal of Digital Creativity, 13 pages.
6. *Sriram Subramanian; Dzmitry Aliakseyeu and Andrés Lucero*, “Multi-Layer Interaction on Digital Tables”, in ACM UIST – User Interface and Software Technology 2006 (Acceptance Rate = 22.5%).
7. *Miguel Nacenta; Samer Sallam; Bernard Champoux; Sriram Subramanian; and Carl Gutwin*, “Perspective Cursor: Perspective-based Interaction for Multi-Display Environments”, in ACM CHI - Human-Factors in computing systems 2006. (~120 accepted out of 600 submissions)
8. *Jeff Smith, Jeremy Long, Tanya Lung, Mohd. Anwar, and Sriram Subramanian*, “PaperSpace: A System for Managing Digital and Paper Documents”, in Extended Abstracts of ACM CHI - Human-Factors in computing systems 2006.
9. *David Pinelle, Liu Jun, Samer Sallam, Carl Gutwin and Sriram Subramanian*, “TNT: Improved Rotation and Translation on Digital Tables”, in Proceedings of Graphics Interface 2006. (~30 accepted out of 100 submissions).
10. *Adrian Reetz, Carl Gutwin, Tad Stach, Miguel Nacenta, Sriram Subramanian, and Susana Lopez* Superflick: a Natural and Efficient Technique for Long-distance Movement on Digital Tables, in Proceedings of Graphics Interface 2006. (~30 accepted out of 100 submissions).
11. *Carrie Gates, Sriram Subramanian, and Carl Gutwin*, “DJ – Audience Interaction and Awareness in Nightclubs”, in Proceedings of ACM Design of Interactive Systems 2006. (34 accepted out of 136 submissions).
12. *Dzmitry Aliakseyeu; Miguel A. Nacenta; Sriram Subramanian and Carl Gutwin*, “Bubble Radar: Efficient Pen-Based Interaction”, in Proceedings of ACM Advanced Visual Interface 2006. (Acceptance rate = 25%).
13. *Dzmitry Aliakseyeu; Sriram Subramanian; Andrés Lucero; and Carl Gutwin*, “Interacting with Piles of Artifacts on a Digital Table”, in Proceedings of ACM Advanced Visual Interface 2006. (Acceptance rate = 25%).
14. *Jared Cechanowicz, Steven Dawson, Matt Victor, and Sriram Subramanian*, “Stylus Based Text Input Using Expanding CIRRI”, in Proceedings of ACM Advanced Visual Interface 2006. (Acceptance rate = 25%).
15. *Miguel A. Nacenta; Dimitry Aliakseyeu; Sriram Subramanian; and Carl Gutwin*, “A Comparison of Techniques for Multi-Display Reaching”, in ACM CHI - Human-Factors in computing systems 2005, CHI ‘05, pp. 371-380. (Acceptance rate = 20%).
16. *Bernard Champoux and Sriram Subramanian*, “A Design Approach to Tangible User Interfaces”, Australasian Journal of Information Systems Special Issue 2004, pp. 36-51.
17. *Jeff Dyck; Carl Gutwin; Sriram Subramanian, and Chris Fedak*, “High-Performance Telepointers”, in Proceedings of ACM CSCW 2004, pp. 172-181. (Acceptance rate = 25%)
18. *Inaki Rano; Bogdan Raducanu; and Sriram Subramanian*, “Human Presence Detection and Tracking for a Concierge Robot”, in Proceedings of IFAC Symposium on Intelligent Autonomous Vehicles, 2003, pp 5.2.1- 6.

19. *Bernard Champoux and Sriram Subramanian*, “Drive Interaction Designs from Conceptualization through Prototyping to Implementation”, in Proceedings of Human Factors and Ergonomics Society Europe, Chapter 2003, pp.317-319.
20. *Bernard Champoux; Jean-Bernard Martens; Sriram Subramanian; and Dzmitry Aliakseyeu*, “A Digital way to Draw”, in Proceedings of British HCI, 2003, pp.171-175.
21. *Sriram Subramanian; Dzmitry Aliakseyeu; and Jean-Bernard Martens*, “Empirical Evaluation of Performance in Hybrid 3D and 2D Interfaces”, in Proceedings of Interact, 2003, pp. 916-919.
22. *Sriram Subramanian; Dzmitry Aliakseyeu; and Jean-Bernard Martens*, “Measuring Coordination in 2D Positioning Tasks”, in Proceedings of Interact, 2003, pp. 295-302.
23. *Dzmitry Aliakseyeu; Bernard Champoux; Jean-Bernard Martens; Mathias Rauterberg; and Sriram Subramanian*, “The Visual Interaction Platform”, in Proceedings of Interact, 2003, pp. 1101-1102.
24. *Sriram Subramanian; Frank Dijkstra; and Bernard Champoux*, “Investigating Subjective Preferences in Multiple Degrees-of-Freedom Inputs”, in ACM CHI - Human-Factors in Computing Systems, 2003, pp. 934 -935.
25. *Dzmitry Aliakseyeu; Jean-Bernard Martens; Mathias Rauterberg; and Sriram Subramanian*, “Interaction Techniques for Navigation through and Manipulation of 2D and 3D Data”, in Proceedings of Eurographics conference on Virtual Environments, May 2002, pp. 179-188.
26. *Dzmitry Aliakseyeu; Jean-Bernard Martens; Sriram Subramanian; Marina Vroubel; and Wieger Wesselink*, “Visual Interaction Platform”, in Proceedings of Interact, 2001, pp. 232-239.
27. *Sriram Subramanian; Wijnand A. IJsselsteijn*, “Survey and Classification of Spatial Object Manipulation Techniques”, in Proceedings of OzCHI, 2000, pp. 330 - 337.
28. *Sriram Subramanian; Anamitra Makur*, “Predictive Absolute Moment Block Truncation Coding for Image Compression”, in Proceedings of SPIE Visual Communication and Image Processing 2000, June 2000, pp. 830 - 837.
29. *Sriram Subramanian; Chan Kap Luc; and Mo Xioran*, “Regular Texture Fault Detection using a Wold-Like Decomposition”, in Proceedings of Image and Vision Computing New Zealand, 1998, 6 pages.

### **Under Review**

30. *Tokuo Yamaguchi, Sriram Subramanian, Yoshifumi Kitamura and Fumio Kishno*, “Strategic Negotiations in Tabletops”, *submitted for review to Interact 2007*.
31. *Sriram Subramanian, Jan Korst and Vincent Buil*, “Tabletop collaboration through Tangible Interaction”, *submitted for review to IEEE Workshop in Tangible Interactions in Collaborative Environments*.

### **Workshops**

1. *Miguel A. Nacenta and Sriram Subramanian*, “The Spaces In-between: Seamful vs. Seamless Interactions”, Workshop in International conference on Ubiquitous Computing – Ubicomp 2005, 3 pages.
2. *Dimitry Aliakseyeu and Sriram Subramanian*, “The Spaces In-between: Seamful vs. Seamless Interactions”, Workshop in International conference on Ubiquitous Computing - Ubicomp 2005, 3 pages.
3. *Sriram Subramanian and Wijnand A. IJsselsteijn*, “Volume Navigation Techniques”, workshop on Escaping Reality in IEEE conference on VR 2001, 4 pages.

### **Invited**

1. *Sriram Subramanian, Carl Gutwin, Miguel Nacenta Sanchez, Chris Power, and Liu Jun*, “Haptic and Tactile Feedback in Directed Movements”, in Proceedings of conference on Guidelines on Tactile and Haptic Interactions, 2005, 6 pages.
2. *Kshitiz Anand and Sriram Subramanian*, “Tangible Music: Increasing the Pleasures of Human-Human Interactions using Phidgets”, in Proceedings of the first Indian HCI conference, 2004, 8 pages.

3. *Dima Aliakseyeu, Sriram Subramanian and Marina Vroubel*, “Pen and Paper Visual Interaction Platform”. Poster at 1<sup>st</sup> International Symposium on User System Interaction. Sept. 2000, 1 page.

### **Technical Reports**

1. *David Pinelle, Carl Gutwin and Sriram Subramanian*, “Designing Digital Tables for Highly Integrated Collaboration” Technical Report HCI-TR-2006-02, 4 pages.
2. *Liu Jun, Sriram Subramanian, and Carl Gutwin*, “Supporting Handoff in Tabletop Shared Workspaces”, Technical Report HCI-TR-2005-02, 4 pages.
3. *Dzmitry Aliakseyeu; Jean-Bernard Martens; Sriram Subramanian; Marina Vroubel; and Wieger Wesselink*, “Visual Interaction Platform”, In IPO Annual Progress Report 35, 2001, pp. 117-127.

### **Book Chapters/ Thesis**

1. (Guest eds) *Jacques Terken, Sriram Subramanian and Massimo Zancanaro* “User-Centered Design and Evaluation of Services for Human-Human Communication and Collaboration”, Special Issue of *Personal and Ubiquitous Computing* (2008).
2. (eds.) *Jacques Terken, Sriram Subramanian and Massimo Zancanaro*, “User-Centered Design and Evaluation for Co-located Human-Human Communication and Collaboration”, workshop proceedings at ICMI 2005.
3. *Sriram Subramanian*, “Tangible Interfaces for Volume Navigation” – April 2004, Eindhoven University Press.
4. *Sriram Subramanian*, “Image Compression Algorithms with Fixed Time Decoding” – April 1999, Indian Institute of Science Press.

### **System Demonstrations for General Public (public awareness/education)**

1. “*The Visual Interaction Platform*” March 2001 for faculty of Industrial Design, Eindhoven University of Technology, Eindhoven, The Netherlands.
2. “*The Visual Interaction Platform*” Oct 2002 for faculty of Technology Management, Eindhoven University of Technology, Eindhoven, The Netherlands.
3. “*A New Interaction Technique for Navigation and Manipulation of 2D and 3D data*”, invited Hands-on Experience at CHI 2002, Minneapolis, USA.

### **Invited Presentations**

1. *Interacting with Digital Tables*, University of Osaka, March 2006.
2. *Interacting with Digital Tables*, National University of Singapore, Singapore, March 2006.
3. *Interacting with Digital Tables*, University of Chiba, Japan, February 2006.
4. *Perspective Cursor*, University of Osaka, Japan, Sept. 2005.
5. *HCI and Graphics research at University of Saskatchewan*, Advanced Telecommunication Research Labs, Kyoto, Japan, Aug 2004.
6. *Tangible Interfaces for Volume Navigation*, Department of Industrial Design, Eindhoven University of Technology, The Netherlands, April 2004.
7. *The Visual Interaction Platform*, Department of Computer Science, University of Waterloo, Waterloo, Canada, April 2003.
8. *The Visual Interaction Platform*, Department of Computer Science, University of Saskatchewan, Saskatoon, Canada, April 2003.
9. *Design and Evaluation of 3D input devices*, Department of Electrical and Communication Engineering, Indian Institute of Science, Bangalore, India, May 2002.
10. *Research with Image Compression Algorithms and User-Interface Design*, Department of Computer Engineering, University of Toronto, Toronto, Canada, April 2002.
11. *3D User Interface for Volume Data Browsing*, Department of Computer Science, University of Waikato, Hamilton, New Zealand, Dec 2000.
12. *Spatial Object Manipulation Techniques (for User-System Interaction)*, School of Computer Science and Engineering, University of New-South Wales, Sydney, Australia, June 2000.

**Research Funding:**

I have been successful in securing research funding from Natural Science and Engineering Research Council of Canada (NSERC) for a discovery grant and an equipment grant for \$22,600. Recently, I was also invited to join an NSERC sponsored research network called NECTAR. Through NECTAR, I receive \$41,500 per year to support students. NECTAR funding will be available from 2005 to 2007. In the two years that I spent in Saskatchewan I've secured over \$80,000 of equipment grants and \$250,000 to support students and travel. I am comfortable writing research proposals and consider obtaining research grants a critical part of my research requirement.

**Professional Memberships:**

ACM-SIGGRAPH; ACM-CHI; IEEE-Signal Processing and IEEE-Computers.

**Refereeing & Committee:**

In the last two years, I have reviewed more than 30 research papers for various conferences and journals in the area of Human-Computer Interaction and Computer Vision. Some of them (e.g., ACM conference on Computer-Human Interaction; User Interface and Software Technology and IEEE Transactions on SMC) are among the most prestigious publications for the discipline. I have also been asked to review three strategic grant research projects for NSERC.

I have also served on the program committee of several leading conferences (GI, VISAPP, etc.). My duties involve assigning reviewers to various papers and preparing a meta-review for each of the papers. I am also expected to attend the program committee meetings where we decide on acceptance or rejection of the papers. I've recently been approached to be involved as an Associate Chair for ACM CHI 2008.

**Note on Publications:**

Conferences are the primary venue for publication in Human-Computer Interaction. All my publications are in highly competitive peer-reviewed conferences with acceptance rates of 18 to 30% (typically CHI accepts about 100 submissions from over 500 papers). Most of my full papers would be readily accepted in most peer-reviewed HCI journals which have an acceptance rate of over 35%. It is generally considered that ACM CHI and CSCW conference papers are archival contributions.