

**Education**

2001 **Master of Science in Design** (Industrial Design), **Arizona State University**  
 1996 **Bachelor of Architecture**, **School of Planning and Architecture**, New Delhi, India

**Professional Appointments**

2021- Present **Chair and Associate Professor** of Industrial Design, Iowa State University  
 2017-2021 **Chair and Associate Professor** of Industrial Design, Virginia Tech  
 2016- 2017 **Sr. Design education evangelist**, Autodesk  
 2016- 2017 **Adjunct Associate Professor of industrial design**, Virginia Tech  
 2014 – 2016 **Fusion 360 advocate** , Autodesk  
 2012 – 2016 **Associate Professor of Industrial Design**, School of Architecture + Design, College of Architecture and Urban Studies, Virginia Tech  
 2014 – 2015 **Visiting Professor**, Aayojan school of architecture and design, Jaipur, India  
 2007 –2012 **Assistant Professor of Industrial Design**, School of Architecture + Design, College of Architecture and Urban Studies, Virginia Tech  
 2003- 2007 **Visiting Assistant Professor of Industrial Design**, School of Architecture + Design, College of Architecture and Urban Studies, Virginia Tech  
 2005 - 2006 Industrial Designer (winter and summer break) at GKDI - A subsidiary of Yamaha Motor Corporation  
 2002- 2003 **Adjunct Professor of Industrial Design**, School of Architecture + Design, College of Architecture & Urban Studies, Virginia Tech  
 2001-2004 Industrial designer at Couvrette Building Systems.  
 1999- 2001 **Graduate teaching assistant**, School of Architecture, Arizona state university  
 1995-1999 **Designer**, Ampersand, a multi disciplinary design firm in New Delhi, India

**Awards & Recognition**

2011-Present Section Chair, Design for the Majority Section, Industrial Designers Society of America, IDSA

**Teaching Awards**

2015-16 CAUS Certificate for Creative Achievement  
 2015- 16 Diggs Teaching Scholar award  
 2013-14 CAUS Certificate for Excellence in Teaching  
 2011-12 Creative Achievement Award College of Architecture and Urban Studies  
 2009-10 Certificate of Teaching Excellence Virginia Tech

**Research Awards**

**\* These are result of work done by my students in design studios and independent studies that I have taught**

2015-16 Finalist for the connected devices competition, two student entries \*  
 2014-15 Winner of the UX award, Student category \*  
 2013-14 Recipient of inaugural University Illuminator award  
 2013-14 Winner of Design Ignites change award, Supported by Adobe foundation \*  
 2011-12 Finalist for the inaugural World Design Impact Prize in Helsinki, Finland (out of 37 projects worldwide)  
 2011-12 Winner of the IDEA Design awards, **Students section** for laXmi project (Bronze) \*  
 2011-12 Winner of the IDEA Design awards, **Students section** for IMMUNE project (Bronze) \*  
 2011-12 Winner of the Design4All foundation award, IMMUNE project \*

## Outreach and Diversity Awards

2013-14	a+d Excellence in Outreach award
2011-12	University Excellence in international Outreach Award
2011-12	CAUS Award for excellence in Outreach Award
2010-11	Diversity Award College of Architecture and Urban Studies
2010-11	Excellence in Outreach Award School of Architecture + Design

## Grants

2018	<b>ICAT Catalyst Grant</b> - Design and build a SAFE shower stall for aging in place.
2017	<b>ICAT SEAD grant 3000.00</b> - Cybersecurity for senior citizens
2014	<b>Autodesk grant \$10,000.00</b> – VANISHING – An art installation to create awareness about the low child sex ratio in India. <b>The PI, Dr. Manisha Sharma</b> , was invited to Griffith university, Australia to deliver a lecture and set up the art installation.
2013	<b>VT-TAT: Virginia Tech Text Analytics Toolbox</b> – Creating a user interface for text analytics solution. (Co-PI). ICAT SEAD grant to support undergraduate student researchers. \$750.0
2013	<b>Digital storytelling for social impact</b> - Creating powerful multimedia stories about social issues and solutions that aim to make things better. ICAT SEAD grant to support undergraduate student researcher. \$2000.00
2012	<b>TILES: Trajectories of Informal Learning among Engineering Students</b> - Theoretical and Empirical Contributions for Understanding and Measuring Impact. NSF funded multiyear interdisciplinary research project. <b>\$360,000.00</b> Aditya Johri (PI), Akshay Sharma (Co-PI) Gary Skaggs(Co-PI)
2011	<b>National Science Foundation Grant for Research Experience for Undergraduates, \$ 18,000.00 Supplemental Grant</b> to support five Industrial Design students and two Engineering students from other universities to engage in research related to Designing Empowerment.
2011	<b>Small Grant, VT Office of International Research, Education, and Development (OIREd) \$ 2,500.00.</b> Co-awarded to develop an interdisciplinary course addressing the issues of gender parity and women’s empowerment through Design. I will be working with Susan Wysche, an NSF fellow at Virginia tech in the Computer Science department.
2009	<b>Development of Online Course Grant, Institute of Distance and Distributed Learning, VT \$9,900.00.</b> Awarded to develop an online Graduate level certificate course to be offered online by the Institute of Distance and Distributed Learning
2008	<b>Summer Sessions Grant for Development of a New Course, VT, \$ 5000.00</b> Awarded to develop the curriculum for a course to be conducted over six weeks.
2008	<b>The Institute of Society, Culture and Environment - IRG Grant, \$ 25,700.00</b> Awarded to lead a collaborative effort for the creation of a proof of concept vehicle for the Project, Autonomous Personal Transportation
2007-2008	<b>Institute of Critical Technology and Applied Science Grant, VT, \$ 47,000.00</b> Awarded to lead a collaborative effort between Industrial Design and Mechanical Engineering departments to advance the idea of Autonomous Personal Transportation.
2008	<b>Faculty Research Grant, VT, \$1500.00</b> Awarded for exploring the possibility of a Study Abroad program in India for School of Architecture + Design

## Peer Reviewed Publications and Conference Proceedings

- 2015 **Akshay Sharma, Shruti Garg<sup>2</sup>, Vibhuti Shah<sup>2</sup>, Pooja Agrawal<sup>3</sup>, Parul Lohan<sup>3</sup>**, [Abstract, Presentation and Publication]Basics of design : Lessons from the walled city of Jaipur. DesignEd2015 Conference, Hongkong
- 2014 **A Sharma, A Johri - Learning, Culture and Social Interaction, 2014** Learning and empowerment: Designing a financial literacy tool to teach long-term investing to illiterate women in rural India
- 2013 **Akshay Sharma, Aditya Johri (2013)**, Learning and empowerment: Designing a financial literacy tool to teach long-term investing to illiterate women in rural India, Learning, Culture and Social Interaction, Available online 5 November 2013, ISSN 2210-6561, <http://dx.doi.org/10.1016/j.lcsi.2013.10.003>.
- 2013 **A Johri, A Sharma - Synthesis Lectures on Global Engineering, 2013**, Designing development: Case study of an international education and outreach program
- 2013 **Stephanie Marie Kusano, Aditya Johri, Akshay Sharma (2013)**, Peer Scaffolding in Studio Courses, ASEE conference 2013.
- 2012 **A Johri, A Sharma, AC 2012-3941:** Learning from working on other's problems : Case study of an interdisciplinary project based global service learning program
- 2012 **A SHARMA - LEADING THROUGH DESIGN, 2012 International design management research conference, August 8-9, Boston, MA, USA** Designing Empowerment: Design Thinking For Social Impact
- 2012 **A Johri, A Sharma - American Society for Engineering Education, 2012** Learning from Working on Others' Problems: Case Study of an Interdisciplinary Project-based Global Service- Learning Program
- 2012 **KS Swan, S Zou, A Sharma - ... Approaches to Product Design, Innovation, & Branding ... , 2012 [Book chapter]** Designing Empowerment–Design Thinking for Social Impact, pages 195-205
- 2011 **Sharma, Akshay. (2011)**. [Abstract and publication]. “Designing Empowerment” – A story about the potential impact of studio projects on the lives of underserved populations in developing countries. , *INNOVATIONS, forthcoming in Winter 2011*, A peer reviewed Design Journal.
- 2010 **A Goncher, A Johri, A Sharma - Frontiers in Education Conference (FIE), 2010 IEEE, 2010** Use-value and functionality versus aesthetics and experience: Inculcation of design ideologies in engineering and industrial design students
- 2010 **Sharma, Akshay. (2010)**. [Abstract, Presentation and Publication]. “Design for other cultures” - Designed empowerment. DesignEd2010 Conference, Hongkong
- 2010 **Goncher, A., Johri, A. & Sharma, A. (2010)**. “Use-Value and Functionality versus Aesthetics and Experience: Inculcation of Design Ideologies in Engineering and Industrial Design Students”, Work in Progress to appear in *Proceedings of IEEE Frontiers in Education*
- 2010 **Sharma, Akshay & Webster, Dane**. [Abstract and paper] Ideation NXT – An experiment in teaching 3D modeling applications. Pedagogy & Practice
- 2010 **Sharma, Akshay (2010)**. [Abstract and Presentation] “Thin Physical Interface-A new approach for teaching and learning 3D applications”, *ISDA Southern District Conference*
- 2010 **Sharma, Akshay (2010)**. [Abstract and Presentation] “Designed - Access to knowledge for girls in developing societies”, *ISDA International Conference - 2010*
- 2009 **Sharma, Akshay (2009)**. [Abstract and paper] “Ideation NXT- A new approach to learning CAD for Design, Creativity and Cognition”, *ACM International Conference*, Berkeley CA.
- 2009 **Sharma, Akshay (2009)**. [Abstract, Paper and Presentation] “Sculpting Form in computer age- A new approach to CAD infused Design Process”, *ICSID (International Council of Societies of Industrial Design) International Design Conference*, Singapore

2007 **Sharma, Akshay** & Shimon Shmueli. [Abstract & Presentation] Motorcycles and Art of Product Design. 2007 **IDSA-ICSID International Design conference**, San Francisco

***Invited Presentation / Workshops / talks***

2016 **XSUMMIT** I was nominated, interviewed and selected to speak at XSUMMIT 2016 at Autodesk in San Francisco. I spoke about work I have done with my students at Virginia Tech

2016 As part of conference sponsorship, presented at Society of Women Engineers conference in Philadelphia. (SWE, 2016)

2016 As part of conference sponsorship, conducted a workshop at Industrial Designers Society of America conference in Detroit. (IDSA, 2016)

2016 As part of conference sponsorship, conducted a workshop at American Society of Engineering Education conference in New Orleans. (ASEE, 2016)

2015 **Basics of design : Lessons from the walled city of Jaipur.** Lecture in Hancock hall for CAUS community

2015 **Basics of design : Lessons from the walled city of Jaipur,** Presentation at DesignED 2015 conference in Hong Kong

2014 **TEDX at VT** I was nominated, interviewed and selected to speak at TEDX 2014 at virginia tech. I spoke about work I have done with my students. (<https://youtu.be/hnd2-hdwe38>)

2014 **I was invited to present at Autodesk University, Las Vegas, 2014.** I presented the work on a new methodology for learning 3D modeling program and how Autodesk Fusion 360 allows for a shorter learning curve

2014 **Autodesk university -India** I was invited to speak about my work under designing empowerment initiative, a collaborative effort that includes faculty and students from multiple disciplines.

2014 **Invited participation** I was invited to present and participate in a discussion on problem-based learning and community engagement. The event was organized by the networked learning initiative at virginia tech. I presented remotely using Skype.

2014 **Invited participation** I was invited to present and participate in a discussion on “Development and Humanitarianism,” at virginia tech.

2014 **Fusion 360 workshop and talk** at Fairfax high school as part of Arlington school district's initiative for the integration of 3D modeling and 3D printing in high school curriculum.

2014 **Fusion 360 workshop and talk** at Pune Design Festival in India

2014 **Fusion 360 workshop** I conducted a two week long fusion 360 workshop with fifteen students at Srishti school of design and technology, Bangalore, India. The workshop results can be seen at : (<https://gallery.autodesk.com/fusion-360/projects/workshop-at-srishti-school-of-art-design-and-technology>)

2014 **Design thinking workshop and talk** at St. Louis University's Center for Global Citizenship.

2014 **Presentation of my work** at Microfinance Africa, a St. Louis based charitable organization that is working with impoverished communities in Uganda.

2014 **Presentation at School of Business, Virginia Tech.** I was invited to present my work at Pamplin School of business by Dr. Terry Cobb, associate professor in school of business. I presented collaboration strategies used in multi disciplinary projects I have led or participated with my students.

2014 **Radio interview** I was interviewed by Andy Morikawa, for the program, “ At the table” that airs on WVTF.

- 2014 **Symposium on Solid and Physical modeling, Hongkong** I presented my work with students in the area of 3D modeling and also represented Autodesk to present the best paper awards.
- 2014 **CRISIL foundation** I presented my work under the designing empowerment initiative to CRISIL foundation in Mumbai, India. **laXmi** the financial literacy education system designed by my students under my guidance, is being adopted for educating one hundred thousand women in rural north east of India.
- 2013 **Collaboration with Professors Ralph Hall and Jocelyn Widmer in SPIA**, to experiment with the concept of specialized studios focusing on a specific aspect of the design process continued this year as well. Our collaboration featured in a news story <http://spia.vt.edu/news/creating-real-world-social-impacts-international-development>
- 2013 **Submitted a proposal to present at the Dean's forum on global engagement and presented the work done under designing empowerment initiative.** The proposal is a result of work done during the fall 2013 Designing Empowerment Studio.
- 2011 **Sharma, Akshay**, "Design as a Tool for Empowerment" , **Young Scholars Conference** on Product Design, Branding, & Social Enterprise in International Marketing, Mason School of Business, College of William & Mary, Williamsburg, VA
- 2011 **Sharma, Akshay**, and Aditya Johri, "Designing for Development: Three Preliminary Studies from Field Research in India", **ACM Conference on Computer Supported Cooperative Work (CSCW 2011)**, China
- 2010 **Sharma, Akshay**, "Thinking on Paper: Strategies for Visual form Exploration in Design Process," Hongkong Design Institute (HKDI), Hongkong, China
- 2010 **Sharma, Akshay**, "Thinking on Paper: Strategies for Visual form Exploration in Design Process," IILM School of Design (IILM), New Delhi, India
- 2009 **Sharma, Akshay**, "Thinking on Paper: Strategies for Visual form Exploration in Design Process," **Indian Institute of Craft and Design (IICD)** , Jaipur, India
- 2008 **Sharma, Akshay**, " Thinking on Paper," a weeklong Design Visualization course covering analogue as well as digital media, **Indian Institute of Craft and Design (IICD)**, Jaipur, India

### **Collaborations**

- 2016 **ISDI, Mumbai** Facilitated a multidisciplinary collaborative project between Indian School of Design and Innovation, Mumbai and GE appliances to develop a space saving kitchen appliance for Indian context.
- 2016 Collaboration with Olin college of engineering to facilitate a collaborative project between the senior capstone class and a NGO in Rwanda.
- 2016 Collaboration with Element design in Boston to facilitate a collaborative project that became the basis for a collaborative workshop during IDSA conference in Detroit, MI.
- 2016 Facilitated a collaborative partnership with Prof. Andy Law at RISD and Autodesk to explore the future of design education from the tools and technological aspects.
- 2014 Collaboration with Aayojan School of Architecture in Jaipur, India to explore a student exchange program between students of the two institutes.
- 2011 **Deep Dive Workshop** to develop a better Prosthetic for Jaipur foot organization. Nov 2011 in collaboration with the Dreams Lab (<http://www.dreams.me.vt.edu/>) with Dr. Chris Williams in Mechanical Engineering Department, Virginia Tech.
- 2010 **Summer IDStudio collaboration with Prof. Ed Dorsa** to provide ID students an opportunity to work with students from other universities on projects related to empowerment. The collaboration resulted in two conference papers, currently under revision for submission for Computer Human Interaction (CHI2012) Conference.

- 2010 **Collaboration with Infrastructure Leasing and Financial Services**, A multinational Corporation, to Design the next generation of Community Learning Device. Industrial Design students worked with Engineering students to propose a new solution that incorporates a unique semantic approach to the Device. The new version will incorporate the suggestions from the design team at Virginia Tech
- 2010 **Collaboration with "PRADAAN"**, an NGO in India that has been working in the Microfinancing sector for past twenty five years. I collaborated with them to develop a financial literacy system for semi/illiterate women who are part of Microfinancing Self Help Groups. The solution is in the final stages of revision and has also been nominated for the World Design Impact prize. To be announced in Feb, 2012.
- 2009 **Collaboration with School of Visual Arts**. I worked with Prof. Dane Webster to develop a novel methodology for teaching 3D modeling software. The methodology was tested in an interdisciplinary class and the findings have been published in proceedings of "Conference on Higher Education Pedagogy".
- 2007 **Collaboration with Mechanical Engineering Dept. at Virginia Tech**. I worked with Dr. Alfred Wicks to lead a team of five Industrial Design students and five Mechanical Engineering Seniors working on a working prototype of an Autonomous Personal Transportation Solution. The project was the result of an Industrial Design Thesis.

### **Books & Book chapters**

- 2013 Aditya Johri; **Akshay Sharma** Designing Development: Case Study of an International Education and Outreach Program (Synthesis Lectures on Global Engineering) Publisher: Morgan & Claypool Publishers  
Print ISBN-13: 978-1-62705-003-6, Web ISBN-13: 978-1-62705-004-3
- 2012 **Sharma, A.** Design Thinking for Social Impact (Pg 193-205). Advances in International Marketing; Vol-23; Edited by Swan and Zou; ISBN: 978-1-78190-016-1

B1. **Johri, A.** & Sharma, A. (2013). [Designing Development: Case Study of an International Education and Outreach Program](#). Morgan and Claypool Synthesis Lecture Series.

J19. Sharma, A. & **Johri, A.** (2014). Learning and Empowerment: Designing a Financial Literacy Tool to Teach Long-term Investing to Illiterate Women in Rural India. *Learning, Culture and Social Interaction, Vol. 3, pp. 21-33.*

C52. Chowdhury, B., Kusano, S., **Johri, A.** & Sharma, A. (2014). Peer Scaffolding in an Interdisciplinary Studio-based Design Course. *Proceedings of ASEE Annual Conference 2014.*

C39. **Johri, A.** & Sharma, A. (2012). Learning From Working on Others' Problems: Engaging Students in Long-term Global Projects for Reciprocal Learning. *Proceedings of ASEE Annual Conference 2012.*

C23. Goncher, A., **Johri, A.** & Sharma, A. (2010). [Use-Value and Functionality versus Aesthetics](#)

*and Experience: Inculcation of Design Ideologies in Engineering and Industrial Design Students.* *Work in Progress, Proceedings of IEEE Frontiers in Education, 2010.*

15. *Johri, A. & Sharma, A. (2011). Designing for Development: Three Preliminaries Studies from Field Research in India. Workshop on Mobile Collaboration in the Developing World at ACM CSCW 2011, Hangzhou, China, March 20, 2011.*