Jerry O. Talton

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EDUCATION

Stanford University, Stanford CA	2005 – 2011
PhD in Computer Science, June 2011	
University of Illinois at Urbana-Champaign, Urbana IL	2000 – 2005
MS in Computer Science, May 2005	
BS in Computer Science, Minor in Mathematics, December 2003	
Thomas Jefferson High School for Science and Technology, Alexandria VA	1996 – 2000
Governor's Advanced Studies Diploma	

EXPERIENCE

Research Assistant Professor, Siebel School of Computing and Data Science (Urbana, IL)	2025 – present
Chief Technology Officer, Carta, Inc. (Palo Alto CA)	2018 – 2022
Senior Engineering Manager, Machine Learning, Slack Technologies (New York NY)	2017 – 2018
Founder & CEO, Apropose, Inc. (Mountain View CA)	2013 – 2016
Research Scientist, Intel Corporation (Hillsboro OR)	2011 – 2013
Researcher in Residence, Intel Science and Technology Center for Visual Computing	2012 – 2013
Procedural Imaging Intern, Adobe Systems Inc. (San Jose CA)	Summer 2009
Software Intern, NVIDIA (San Jose CA)	Summer 2007
Graduate Research Assistant, Stanford Graphics Lab	2005 – 2012
Architecture Intern, NVIDIA (San Jose CA)	Summer 2005
Research Assistant, UIUC Graphics Lab	2004 – 2005
Computer Scientist Assistant, SAIC/DEMACO (Champaign IL)	2001 – 2002
Intern, SAIC (Falls Church VA)	Summer 2001

REFEREED PUBLICATIONS

Sujay Khandekar, Joseph Higgs, Yuanzhe Bian, Chae Won Ryu, Jerry O. Talton, and Ranjitha Kumar. **Opico: A Study of Emoji-first Communication in a Mobile Social App.** *Companion Proceedings of the 2019 World Wide Web Conference*, May 2019.

Jerry O. Talton, Krishna Dusad, Konstantinos Koiliaris, and Ranjitha Kumar. **How Do People Sort by Ratings?** *Proceedings of the 38th Annual ACM SIGCHI Conference on Human Factors in Computing Systems*, May 2019.

Haizi Yu, Biplab Deka, Jerry O. Talton, and Ranjitha Kumar. **Accounting for Taste: Ranking Curators, Creators, and Content in Social Networks.** *Proceedings of the 35th Annual ACM SIGCHI Conference on Human Factors in Computing Systems*, May 2016

Biplab Deka, Haizi Yu, Devin Ho, Zifeng Huang, Jerry O. Talton, and Ranjitha Kumar. **Ranking Designs and Users in Online Social Networks.** *Extended Abstracts of the 33rd ACM SIGCHI Conference on Human Factors in Computing Systems*, April 2015.

Ranjitha Kumar, Arvind Satyanarayan, Cesar Torres, Maxine Lim, Salman Ahmad, Scott R. Klemmer, and Jerry O. Talton. **Webzeitgeist: Design Mining the Web.** *Proceedings of the 31st ACM SIGCHI Conference on Human Factors in Computing Systems*, May 2013. BEST PAPER AWARD

Jerry O. Talton, Lingfeng Yang, Ranjitha Kumar, Maxine Lim, Noah D. Goodman, and Radomír Měch. **Learning Design Patterns with Bayesian Grammar Induction.** *Proceedings of the 25th ACM Symposium on User Interface Software and Technology*, October 2012. BEST PAPER NOMINEE

Ranjitha Kumar, Jerry O. Talton, Salman Ahmad, Scott R. Klemmer. **Data-driven Web Design.** *Proceedings of the 29th International Conference on Machine Learning*, June 2012. INVITED APPLICATIONS PAPER

Ranjitha Kumar, Jerry O. Talton, Salman Ahmad, Tim Roughgarden, Scott R. Klemmer. **Flexible Tree Matching.** *Proceedings of the 22nd International Joint Conference on Artificial Intelligence*, July 2011. INVITED PAPER

Ranjitha Kumar, Jerry O. Talton, Salman Ahmad, Scott R. Klemmer. **Bricolage: Example-Based Retargetting for Web Design.** *Proceedings of the 29th ACM SIGCHI Conference on Human Factors in Computing Systems*, May 2011. BEST PAPER AWARD

Jerry O. Talton, Yu Lou, Steve Lesser, Jared Duke, Radomír Měch, and Vladlen Koltun. **Metropolis Procedural Modeling.** *ACM Transactions on Graphics* 30(2). PRESENTED AT SIGGRAPH 2011

Jerry O. Talton, Daniel Gibson, Lingfeng Yang, Pat Hanrahan, and Vladlen Koltun. **Exploratory Modeling with Collaborative Design Spaces.** *ACM Transactions on Graphics* 28(5). PROCEEDINGS OF SIGGRAPH ASIA 2009

Frank Losasso, Jerry O. Talton, Nipun Kwatra, and Ron Fedkiw. **Two-way Coupled SPH and Particle Level Set Fluid Simulation.** *IEEE Transactions on Visualization and Computer Graphics*, Volume 14, Number 4, July/August 2008.

Jerry O. Talton and Darren Fitzpatrick. **Teaching Graphics with the OpenGL Shading Language.** *Proceedings of the 38th SIGCSE Technical Symposium on Computer Science Education*, March 2007.

Jerry O. Talton, Daniel L. Peterson, Sam Kamin, Deborah Israel, and Jalal Al-Muhtadi. **Scavenger Hunt: Computer Science Retention Through Orientation.** *Proceedings of the 37th SIGCSE Technical Symposium on Computer Science Education*, March 2006.

Jerry O. Talton, Nathan A. Carr, and John C. Hart. **Voronoi Rasterization of Sparse Point Sets.** *Proceedings of the 2nd Eurographics Symposium on Point-Based Graphics*, June 2005.

TECHNICAL REPORTS

Jerry O. Talton. [Introducing Highlights.](#) *Several People are Coding: The Slack Engineering Blog*, June 2017.

Maxine Lim, Ranjitha Kumar, Arvind Satyanarayan, Cesar Torres, Jerry O. Talton, Scott R. Klemmer. **Learning Structural Semantics for the Web.** *Stanford University CSTR 2012-03*, November 2012.

Jerry O. Talton, Daniel Gibson, Pat Hanrahan, and Vladlen Koltun. **Collaborative Mapping of a Parametric Design Space.** *Stanford University CSTR 2008-01*, January 2008.

Jerry O. Talton. **Algorithms for Exploring and Controlling Procedural Models.** *Doctoral dissertation, Stanford Univeristy*, June 2011.

Jerry O. Talton. **Voronoi Splatting for Point-Based Surface Visualization.** *Master's thesis, University of Illinois at Urbana-Champaign*, May 2005.

Jerry O. Talton and Devin L. Mullins. **Strategies for Multimedia Classification.** *Senior thesis, University of Illinois at Urbana-Champaign*, May 2003.

PATENTS AND APPLICATIONS

Renaud Bourassa, John Gallagher, Michael Montazeri, Paul Rosania, and Jerry Talton. **Method, Apparatus, and Computer Program Product for Generating a Predicted Channel Add Object in a Group-Based Communication System,** *US Patent Application 20200106630*, filed October 2019.

Renaud Bourassa, Jerry Talton, Jenna Zeigen, Michael Montazeri, and Noah Weiss. **Reducing Transmissions by Suggesting Digital Content for Display in a Group-Based Communication Interface,** *US Patent Application 20200036783*, filed July 2018.

Jerry Talton, Andrew Morrison, Japinder Singh, Jon Katzur, and John Gallagher. **Method, Apparatus, and Computer Program Product for Categorizing Multiple Group-Based Communication Messages,** *US Patent Application 20200036667*, filed July 2018.

Isaiah Greene, Jerry Talton, Noah Weiss, Michael Montazeri, Luis Tandalla, Anna Niess, Renaud Bourassa, and Kyle Stetz. **System, Apparatus, and Computer Program Product for Generating a Group-Based Communication Interface Having Improved Panes Positioned in a Defined Display Window,** *US Patent Application 20190200177*, filed December 2017.

Jerry O. Talton, Ranjitha Kumar, Maxine Lim, Dan Fike, Yi-Ting Yeh, and Ningxia Zhang. **System and Method for Extracting and Searching for Design,** *US Patent Application 20160292275*, filed April 2016.

Radomír Měch and Jerry O. Talton. **Method and Apparatus for Interpolating Hierarchical Procedural Models,** *US Patent 9292941*, filed September 2009, granted March 2016.

HONORS AND AWARDS

Young Alumni Achievement Award *(UIUC Department of Computer Science)*   2022

ACM CHI Best Paper Award *(Webzeitgeist)*	2013
ACM UIST Best Paper Nomination *(Grammar Induction)*	2012
ACM CHI Best Paper Award *(Bricolage)*	2011
Qualcomm Innovation Fellowship, Finalist	2009
Intel Foundation PhD Fellowship	2008 – 2009
NVIDIA Fellowship	2007 – 2008
NSF Graduate Research Fellowship Competition, Honorable Mention	2005, 2006
Stanford University School of Engineering Fellowship	2005
Listed in UIUC's Incomplete List of Teachers Ranked as Excellent by their Students	2004
UIUC Dean's List	2002 – 2003
National Merit Semi-Finalist	1999

TEACHING

Course Assistant, Stanford's CS 448e: Computational Aesthetics and Creativity Support	Spring 2010
Course Assistant, Stanford's CS 348b: Image Synthesis	Spring 2009
Stanford Teaching Fellow, Stanford's CS 148: Introductory Computer Graphics	Summer 2007
Course Assistant, Stanford's CME 306: Numerical Solutions of PDEs	Spring 2007
Course Assistant, Stanford's CS 205: Mathematical Models for Vision, Robotics, and Graphics	Fall 2006
Visiting Lecturer, UC Santa Cruz's CMPS 160: Introduction to Computer Graphics	Spring 2006
Teaching Assistant, UIUC's CS 105: Introduction to Computing for Non-Technical Majors	Spring 2004

INVITED TALKS & PANELS

Equity, Inequity, and Machine Learning.	
MLConf: The Machine Learning Conference, *San Francisco, CA*.	November 2018
Going Zero to One with Machine Learning. General Assembly, *New York, NY*.	July 2018
Data Driven Design Thinking.	
EGG: the Non Conforming Data Science Conference, *New York, NY*.	November 2017
The Productivity Puzzle. Inbox Awesome, *New York, NY*.	November 2017
Exploring the Ethics of AI Powered Products.	
Tow Center's Artificial Intelligence: Practice and Implications, *New York, NY*.	June 2017
People, Too. NYC Media Lab's Machines + Media, *New York, NY*.	April 2017
Design Thinking for Scientists & Engineers. Harvey Mudd College, *Claremont, CA*.	October 2016
Robust to Luck. ACM Reflections	Projections, *Urbana, IL*.	October 2015
How Academic Research in Procedural Modeling Hurts Everyone, Everywhere.	
University of Illinois Computer Graphics Colloquium, *Urbana, IL*.	February 2015
From Grammars to Programs.	
University of California, Berkeley, Computer Graphics Seminar, *Berkeley, CA*.	April 2011

SELECTED PRESS AND MEDIA COVERAGE

Reshama Shaikh. Interview with Jerry Talton. *The MLConf Blog,* 10/2/18.

Elizabeth Woyke. Slack Hopes Its AI Will Keep You from Hating Slack. *MIT Technology Review,* 2/16/18.

Katherine Bourzac. Tools for Better Web Design. *MIT Technology Review,* 4/27/11.

Roland Piquepaille. A Scientific Oscar Goes To Stanford. *ZDNet,* 2/4/08.

Erica Naone. 3-D Design for the Masses. *MIT Technology Review,* 1/17/2008.

Hurley Goodall. Stanford Scientists Build a Better Virtual World. *The Chronicle of Higher Education,* 1/11/08.

Robert Towes. Software Aids Creation of Digital Worlds. *The Stanford Daily,* 1/10/08.

Roland Piquepaille. Build Your Own Virtual 3D Trees. *ZDNet,* 1/10/08.

Ian Lamont. Dryad and the 3D Modeling Challenge. *Computerworld,* 1/7/08.

John Timmer. **Researchers Hope to Enable Crowdsourcing of Virtual Worlds.** *ars technica,* 12/30/07.

SERVICE AND AFFILIATIONS

Reviewer for AIEDAM (2016), CGI (2013), CGF (2011), CHI (2013, 2017), Eurographics (2010, 2012, 2013, 2015), ITiCSE (2007, 2009), SIGCSE (2007 – 2011), SIGGRAPH (2012 – 2015), SIGGRAPH Asia (2011 – 2014, 2018), TOG (2012), TVCG (2014), UIST (2012)

Member (appointed), UIUC Senate Committee on Educational Policy   2005

Member (elected), UIUC CS Courses and Curricula Committee   2004

Graduate Member at Large, UIUC CS Student Advisory Council   2003 – 2005