

Gonzalo Ramos

RESEARCH SCIENTIST & DESIGN TECHNOLOGIST

ABOUT ME

I currently apply my interdisciplinary training and experience in research, design, visualization, and engineering to the intersection of human-computer interaction and artificial intelligence. My goal is to augment and protect people's agencies, and capabilities. I do this by ideating, implementing and studying systems where people and machines complement each other to solve meaningful problems.

CONTACT

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🌐 [linkedin.com/gonzoramos](https://www.linkedin.com/company/gonzoramos)

📺 www.youtube.com/user/gonzoramos

EDUCATION

2007

PH.D., COMPUTER SCIENCE

Thesis: Pressure-Sensitive Pen Interactions.
University of Toronto - Canada

2001

MS.C., COMPUTER SCIENCE

Thesis: Scattered Data Interpolation Using an Alternate Differential Equation Interpolant.
University of Toronto - Canada

1998

LICENCIADO, CIENCIAS DE LA COMPUTACION

Thesis: The Compression of Fingerprint Images Using Wavelets.
Universidad de Buenos Aires - Argentina

SKILLS

Human-Computer Interaction

Human-Centered ML

Interactive ML

Interactive Machine Teaching

Information Visualization

Design

Prototyping

Front-end development

Usability Studies

EXPERIENCE

2019 – Present

PRINCIPAL RESEARCHER – MICROSOFT

2016 – 2019

SENIOR RESEARCHER – MICROSOFT

2015 – 2016

SR. UX SCIENTIST – AMAZON SPECIAL PROJECTS

Lead UX design for a stealth incubation project at the intersection of commerce, mixed reality, hardware, and cloud services.

2013 – 2015

SR. DESIGN TECHNOLOGIST – AMAZON

Lead applied research on future and speculative products. I designed, prototyped, architected, engineered experiences that included, hardware, software, services, mobile, wearables, IoT, TV, AR, NUI, and modern web technologies.

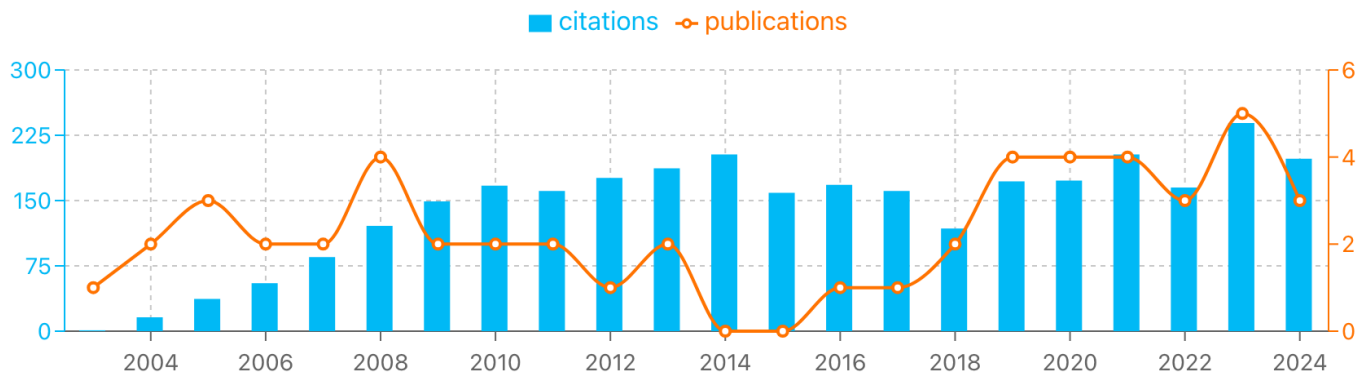
2007 – 2013

SCIENTIST – MICROSOFT

Worked in applied research and development of solutions blending interactive machine learning, novel interaction design, information visualization and online services.

PUBLICATIONS AT A GLANCE

Some statistics from [Semantic Scholar](#) (October 2024)



SELECTED PUBLICATIONS

2020-2024

Srishti Palani and **Gonzalo Ramos**. 2024. **Evolving Roles and Workflows of Creative Practitioners in the Age of Generative AI**. In Proceedings of the 16th Conference on Creativity & Cognition (C&C '24). 170–184.

Catherine Yeh, **Gonzalo Ramos**, Rachel Ng, Andy Huntington, and Richard Banks 2024. **GhostWriter: Augmenting Collaborative Human-AI Writing Experiences Through Personalization and Agency**. ArXiv, abs/2402.08855.

Park, Haekyu, **Gonzalo Ramos**, Jina Suh, Christopher Meek, Rachel Ng and Mary Czerwinski. 2023. **FoundWright: A System to Help People Re-find Pages from Their Web-history**. ArXiv abs/2305.07930

Matthew Jörke, Yasaman S. Sefidgar, Talie Massachi, Jina Suh, and Gonzalo Ramos. 2023. **Pearl: A Technology Probe for Machine-Assisted Reflection on Personal Data**. In Proceedings of the 28th International Conference on Intelligent User Interfaces (IUI '23). 902–918.

Gonzalo Ramos, Napol Rachatasumrit, Jina Suh, Rachel Ng, and Christopher Meek. 2022. **ForSense: Accelerating Online Research Through Sensemaking Integration and Machine Research Support**. ACM Trans. Interact. Intell. Syst. 12, 4, Article 30 (December 2022), 23 pages.

Esther Howe, Jina Suh, Mehrab Bin Morshed, Daniel McDuff, Kael Rowan, Javier Hernandez, Marah Ihab Abdin, **Gonzalo Ramos**, Tracy Tran, Mary Czerwinski. 2022. **Design of Digital Workplace Stress-Reduction Intervention Systems: Effects of Intervention Type and Timing**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '22). Article 327, 1–16.

Arpit Narechania, Adam Fourney, Bongshin Lee, and **Gonzalo Ramos**. 2021. **DIY: Assessing the Correctness of Natural Language to SQL Systems**. In 26th International Conference on Intelligent User Interfaces (IUI '21). 597–607.

Napol Rachatasumrit, **Gonzalo Ramos**, Jina Suh, Rachel Ng, and Christopher Meek. 2021. **ForSense: Accelerating Online Research Through Sensemaking Integration and Machine Research Support**. In 26th International Conference on Intelligent User Interfaces (IUI '21). 608–618.

SELECTED PUBLICATIONS *(continued)*

2012–2020

Tobias Schnabel, **Gonzalo Ramos**, and Saleema Amershi. 2020. **“Who doesn’t like dinosaurs?” Finding and Eliciting Richer Preferences for Recommendation**. In Fourteenth ACM Conference on Recommender Systems (RecSys ’20). 398–407.

Nicole Sultanum, Soroush Ghorashi, Christopher Meek, and **Gonzalo Ramos**. 2020. **A Teaching Language for Building Object Detection Models**. In Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS ’20). 1223–1234.

Felicia Ng, Jina Suh, and **Gonzalo Ramos**. 2020. **Understanding and Supporting Knowledge Decomposition for Machine Teaching**. In Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS ’20). 1183–1194.

Alex Mariakakis, Sifang Chen, Bichlien H. Nguyen, Kirsten Bray, Molly Blank, Jonathan Lester, Lauren Ryan, Paul Johns, **Gonzalo Ramos**, and Asta Roseway. 2020. **EcoPatches: Maker-Friendly Chemical-Based UV Sensing**. In Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS ’20). 1983–1994.

Jina Suh, Soroush Ghorashi, **Gonzalo Ramos**, Nan-Chen Chen, Steven Drucker, Johan Verwey, and Patrice Simard. 2019. **AnchorViz: Facilitating Semantic Data Exploration and Concept Discovery for Interactive Machine Learning**. ACM Trans. Interact. Intell. Syst. 10, 1, Article 7 (January 2020), 38 pages.

Gonzalo Ramos, Jina Suh, Soroush Ghorashi, Christopher Meek, Richard Banks, Saleema Amershi, Rebecca Fiebrink, Alison Smith-Renner, and Gagan Bansal. 2019. **Emerging Perspectives in Human-Centered Machine Learning**. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA ’19). Paper W11, 1–8.

Qian Yang, Jina Suh, Nan-Chen Chen, and **Gonzalo Ramos**. 2018. **Grounding Interactive Machine Learning Tool Design in How Non-Experts Actually Build Models**. In Proceedings of the 2018 Designing Interactive Systems Conference (DIS ’18). 573–584.

Nan-Chen Chen, Jina Suh, Johan Verwey, **Gonzalo Ramos**, Steven Drucker, and Patrice Simard. 2018. **AnchorViz: Facilitating Classifier Error Discovery through Interactive Semantic Data Exploration**. In 23rd International Conference on Intelligent User Interfaces (IUI ’18). 269–280.

Tommaso Piazza, Morten Fjeld, **Gonzalo Ramos**, Asim Evren Yantac, and Shengdong Zhao. 2013. **Holy smartphones and tablets, Batman! mobile interaction’s dynamic duo**. In Proceedings of the 11th Asia Pacific Conference on Computer Human Interaction (APCHI ’13). 63–72.

Tommaso Piazza, Shengdong Zhao, **Gonzalo Ramos**, Asim Evren Yantac, and Morten Fjeld. 2013. **Dynamic duo: phone-tablet interaction on tabletops**. In CHI ’13 Extended Abstracts on Human Factors in Computing Systems (CHI EA ’13). 2803–2804.

Marian Dork, Nathalie Henry Riche, **Gonzalo Ramos**, and Susan Dumais. 2012. **PivotPaths: Strolling through Faceted Information Spaces**. IEEE Transactions on Visualization and Computer Graphics 18, 12 (December 2012), 2709–2718.

SELECTED PUBLICATIONS *(continued)*

2006–2011

- Basak Alper, Nathalie Riche, **Gonzalo Ramos**, and Mary Czerwinski. 2011. **Design Study of LineSets, a Novel Set Visualization Technique**. IEEE Transactions on Visualization and Computer Graphics 17, 12 (December 2011), 2259–2267.
- A. Cockburn, P. Quinn, C. Gutwin, **G. Ramos**, and J. Looser. 2011. **Air pointing: Design and evaluation of spatial target acquisition with and without visual feedback**. International Journal of Human-Computer Studies 69, 6 (June, 2011), 401–414.
- Suporn Pongnumkul, Jue Wang, **Gonzalo Ramos**, and Michael Cohen. 2010. **Content-aware dynamic timeline for video browsing**. In Proceedings of the 23rd annual ACM symposium on User interface software and technology (UIST '10). 139–142.
- Amy K. Karlson, Shamsi T. Iqbal, Brian Meyers, **Gonzalo Ramos**, Kathy Lee, and John C. Tang. 2010. **Mobile taskflow in context: a screenshot study of smartphone usage**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '10). 2009–2018.
- Jaime Teevan, Edward Cutrell, Danyel Fisher, Steven M. Drucker, **Gonzalo Ramos**, Paul André, and Chang Hu. 2009. **Visual snippets: summarizing web pages for search and revisitation**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '09). 2023–2032.
- Xiaojun Bi, Tomer Moscovich, **Gonzalo Ramos**, Ravin Balakrishnan, and Ken Hinckley. 2008. **An exploration of pen rolling for pen-based interaction**. In Proceedings of the 21st annual ACM symposium on User interface software and technology (UIST '08). 191–200.
- Jeremy P. Birnholtz, Carl Gutwin, **Gonzalo Ramos**, and Mark Watson. 2008. **OpenMessenger: gradual initiation of interaction for distributed workgroups**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '08). 1661–1664.
- Pierre Dragicevic, **Gonzalo Ramos**, Jacobo Bibliowicz, Derek Nowrouzezahrai, Ravin Balakrishnan, and Karan Singh. 2008. **Video browsing by direct manipulation**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '08). 237–246.
- Gonzalo Ramos and Ravin Balakrishnan. 2007. **Pressure marks**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '07). 1375–1384.
- Gonzalo Ramos**, Andy Cockburn, Ravin Balakrishnan, and Michel Beaudouin-Lafon. 2007. **Pointing lenses: facilitating stylus input through visual-and motor-space magnification**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '07). 757–766.
- Patrick Baudisch, Desney Tan, Maxime Collomb, Dan Robbins, Ken Hinckley, Maneesh Agrawala, Shengdong Zhao, and **Gonzalo Ramos**. 2006. **Phosphor: explaining transitions in the user interface using afterglow effects**. In Proceedings of the 19th annual ACM symposium on User interface software and technology (UIST '06). 169–178.
- Gonzalo Ramos**, George Robertson, Mary Czerwinski, Desney Tan, Patrick Baudisch, Ken Hinckley, and Maneesh Agrawala. 2006. **Tumble! Splat! helping users access and manipulate occluded content in 2D drawings**. In Proceedings of the working conference on Advanced visual interfaces (AVI '06). 428–435.

SELECTED PUBLICATIONS *(continued)*

2003–2005

Gonzalo Ramos and Ravin Balakrishnan. 2005. **Zliding: fluid zooming and sliding for high precision parameter manipulation**. In Proceedings of the 18th annual ACM symposium on User interface software and technology (UIST '05). 143–152.

Ken Hinckley, Patrick Baudisch, **Gonzalo Ramos**, and Francois Guimbretiere. 2005. **Design and analysis of delimiters for selection-action pen gesture phrases in scriboli**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '05). 451–460.

Ken Hinckley, **Gonzalo Ramos**, Francois Guimbretiere, Patrick Baudisch, and Marc Smith. 2004. In Proceedings of the working conference on Advanced visual interfaces (AVI '04). 23–31.

Gonzalo Ramos, Matthew Boulos, and Ravin Balakrishnan. 2004. **Pressure widgets**. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '04). 487–494.

Gonzalo Ramos and Ravin Balakrishnan. 2003. **Fluid interaction techniques for the control and annotation of digital video**. In Proceedings of the 16th annual ACM symposium on User interface software and technology (UIST '03). 105–114.

SELECTED INDUSTRY PROJECTS

AMAZON EXPLORE

UX and design lead for mixed-reality telepresence [incubation project](#) where customers could travel and experience remote locations from home. Prototyped first versions of the front-end.

PLATFORM FOR INTERACTIVE CONCEPT LEARNING

Contributed to the study, design, and development of an [interactive teaching environment](#) for the creation of machine learning models for classification and entity extraction tasks on text documents.

PHOTOSYNTH 2.0

Designed among others key visual & interactive aspects of the Photosynth 2 [experience](#). Lead engineering team responsible for delivering the web-viewer & synthing back-end pipeline.

WORLD WIDE TELESCOPE ♥ BING MAPS

Designed, prototyped, and implemented [experience blending WWT data with Bing Maps](#) and StreetSide imagery, along with the creation of a novel time browsing interaction technique.

HUMAN CONTEXT

Prototyped first version that processed photos for production, developed decision logic and worked with launch team on a system that composes [thumbnails](#) putting products against a human silhouette. Currently used on millions of products.

ECHO LOOK

Contributed to the concept development, produced interactive prototypes and UX designs for a [style assistant](#) consisting of a hardware unit plus software services.

BING STREETSIDE VIEW

Created prototypes and collaborated in the design of an [experience](#) browsing street imagery as if they were strolling down a street for both mobile and desktop.

SERVICE

2022–Present

BOARD MEMBER – CRA-WP

“[CRA-WP’s] mission is to widen the participation and improve the access, opportunities, and positive experiences of individuals from populations underrepresented in computing research and education.”
As a board member of the Computing Research Association, Widening Participation Comitee, I join a diverse group of members across academia and industry in having a positive impact on all underrepresented groups in CSE..

2018–2021

CHAIR – MSR ADA LOVELACE GRADUATE FELLOWSHIP

“The overarching goal of the Ada Lovelace Fellowship is to increase the diversity of talented people receiving advanced degrees in computing-related fields, and it provides three years of funding that supports research for second-year doctoral students from underrepresented groups in the field of computing”. I collaborated with the Microsoft Research Outreach Team and lead dozens of area chairs across Microsoft Research worldwide to be part of the process of selecting five fellowship recipients from a pool of several hundred applicants.

PATENTS AT A GLANCE

Overview of this data source at <https://tinyurl.com/2738n6ya>

Period	Themes (*)
2004–2024	Data Visualization, Representation, and Exploration
39 patents granted	Image and Video Processing Technologies
While working at	Geospatial and Mapping Technologies
MICROSOFT – 20	User Interfaces and Interactive Systems
AMAZON – 19	Artificial Intelligence and Machine Learning

(*) Extracted using GPT-4o, October 2024 version.