

Fernando Diaz

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Education

PhD	University of Massachusetts Amherst Computer Science <i>“Regularizing Query-Based Retrieval Scores”</i> James Allan, W. Bruce Croft, Sridhar Mahadevan, John Staudenmayer	2008
MS	University of Massachusetts Amherst Computer Science <i>“Browsing-Based User Language Models”</i> James Allan	2004
BS	University of Michigan Ann Arbor Computer Science	1998

Academic Affiliation

McGill University Montréal, QC	Adjunct Professor January 2019-present
NYU Courant Institute of Mathematical Sciences New York, NY	Adjunct Professor January 2013-December 2016
NYU Tandon School of Engineering New York, NY	Adjunct Professor January 2011-May 2011

Research Experience

Google Research Montréal, QC	Staff Research Scientist September 2020-present
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I conduct core research in the evaluation and design of search and recommendation systems. Topics include fairness, accountability, transparency, and ethics of production systems.

Microsoft Research Montréal, QC	Assistant Research Director June 2018-July 2020
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I assist with the management of twenty five researchers focused on natural language processing, machine learning, and the societal impacts of artificial intelligence. I directly lead a multidisciplinary research group focused on fairness, accountability, transparency, and ethics (FATE) of artificial intelligence systems. The group externally publishes basic research and actively collaborates with engineering teams in Microsoft. In addition, I maintain an active research agenda in core information retrieval and its application to production systems such as bing.

Spotify New York, NY	Director of Research March 2017-May 2018
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I led the applied research organization of twenty researchers focused on search, recommendation, metrics, and evaluation. I helped define the company's research approach and culture, including how it interacts internally with product teams and externally with the academic community. In addition, I was an active member of the recommendations leadership team, involved in strategic planning for a two year product roadmap.

Microsoft Research
New York, NY

Senior Researcher
May 2012-March 2017

I led and participated in information retrieval research projects covering crisis informatics, attention modeling, fairness in machine learning, text summarization, and deep learning for search. These themes included extensive collaboration internally with product groups and externally with academic institutions.

Yahoo! Research
New York, NY

Senior Research Scientist
January 2008-March 2012

I led and participated in information retrieval research projects including federated search, time-sensitive web search, match-making systems, multi-document summarization, and modeling user mouse behavior. My role balanced developing production code, technology transfer from research to applied research and engineering groups, and presentation of research results to the wider research community.

Institute for Pure and Applied Mathematics
Los Angeles, CA

Visiting Fellow
September 2007-December 2007

I was a visiting fellow at UCLA for the program in "Mathematics of Knowledge and Search Engines".

University of Massachusetts
Amherst, MA

Research Assistant
September 2001-August 2007

Disseration research focused on information retrieval under the supervision of James Allan.

Overture Research
Pasadena, CA

Intern
June 2003-December 2003

I collaborated with Dr. Rosie Jones to develop tools for the analysis and classification of search queries into temporal categories.

Sony Computer Science Laboratories
Tokyo, Japan

Intern
June 2001-August 2001

As part of participation in the NSF Summer Institute in Japan, I worked with Dr. Hitoshi Iida and Dr. Koiti Hasida of Sony Computer Science Laboratories on the construction of a dialog-based information retrieval system.

University of Massachusetts
Amherst, MA

Research Assistant
September 2000-May 2001

I collaborated with Professors Victor Lesser and Beverly Woolf on a project which leveraged information retrieval techniques in a distributed educational system. We developed a system to

infer symbolic and planning primitives from statistical text analysis.

Bell & Howell Information and Learning
Ann Arbor, MI

Research Assistant
May 1999-August 2000

I worked on the implementation of information retrieval research in a real world search system. Tasks included system design and engineering and statistical evaluation of system robustness.

**Teaching
Experience**

Web Search Engines
New York University

Spring 2013, Fall 2014, Fall 2016

Co-instructed a graduate level course on web search engines. Classes consisted of lectures with evaluation based on homeworks, exams, and a final project.

Web Search

Asian Summer School in Information Access

Summer 2013

Graduate level lecture on web search engines.

Experimental Design for Information Systems

University of Trento

Summer 2012

Co-instructed a graduate level course on information retrieval and data mining. Classes included a combination of lectures and paper discussion.

Advanced Information Retrieval and Databases

New York University

Spring 2011

Co-instructed a graduate level seminar on advanced information retrieval. Classes included a combination of lectures and paper discussion.

Information Retrieval

University of Massachusetts Amherst

Fall 2006

Prepared slides and provided lectures for a graduate-level information retrieval course. Instructor: Professor James Allan.

Applied Information Theory

University of Massachusetts Amherst

Fall 2006

Provided grading support for a graduate-level information theory course. Instructor: Professor Erik Learned-Miller.

Databases

University of Massachusetts Amherst

Spring 2006

Provided teaching assistance for a graduate-level database course. This included grading homeworks, holding office hours, and maintaining a course web page. Instructors: Professors Yanlei Diao and Gerome Miklau.

**Supervision
Experience**

Former Interns

Jaime Arguello (2009, 2010), Associate Professor, University of North Carolina Chapel Hill
Ahmed Hassan (2009), Research Manager, Microsoft Research

Jangwon Seo (2010), Staff Software Engineer, Google
 Qi Guo (2011), Software Engineer, Google
 Matthew Ekstrand-Abeug (2013), Software Engineer, Google
 Pavel Metrikov (2013), Data Scientist, Microsoft
 Teresa Bracamonte (2013), Software Engineer, Equifax
 Ioannis Paparrizos (2014), Postdoctoral Researcher, University of Chicago
 Chris Kedzie (2015), Research Scientist, Rasa
 David Abel (2015), Research Scientist, DeepMind
 Rishabh Mehrotra (2016), Senior Research Scientist, Spotify
 Cristina Garbacea (2016), PhD Student, University of Michigan
 Jesse Anderton (2017), Research Scientist, Spotify
 Daniel Cohen (2019), Postdoctoral Scholar, Brown University
 Ashudeep Singh (2019), PhD Student, Cornell University
 Maria Antoniak (2020), PhD Student, Cornell University

PhD Examiner

Jaime Arguello, Carnegie Mellon University, 2011
 Maria-Hendrike Peetz, University of Amsterdam, 2015
 Matthew Ekstrand-Abeug, Northeastern University, 2017
 Jesse Anderton, Northeastern University, 2019
 Rodrigo Nogueira, New York University, 2019

Publications

Metrics

	<i>ACM Digital Library</i>	<i>Scopus</i>	<i>Google Scholar</i>
articles	73	81	85
citations	2008	2875	5568
citations/article	27.5	35.5	65.5
h-index	23	28	34

Conference

Omer Kirnap, **Fernando Diaz**, Asia Biega, Michael Ekstrand, Ben Carterette, and Emine Yilmaz. Estimation of fair ranking metrics with incomplete judgments. In *Proceedings of the 30th International Conference on World Wide Web*, 2021

Jaime Arguello, Adam Ferguson, Emery Fine, Bhaskar Mitra, Hamed Zamani, and **Fernando Diaz**. Tip of the tongue known-item retrieval: A case study in movie identification. In *Proceedings of the 2021 Conference on Human Information Interaction and Retrieval*, 2021

Ronald Robertson, Alexandra Olteanu, **Fernando Diaz**, Milad Shokouhi, Peter Bailey, and Shashank Jain. Characterizing problematic email reply suggestions. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, 2021

Fernando Diaz, Bhaskar Mitra, Michael D. Ekstrand, Asia J. Biega, and Ben Carterette. Evaluating stochastic rankings with expected exposure. In *Proceedings of the 29th ACM International Conference on Information & Knowledge Management*, 2020. **Best Paper Nomination**

Alexandra Olteanu, **Fernando Diaz**, and Gabriella Kazai. When are search completion suggestions problematic? *Proc. ACM Hum.-Comput. Interact.*, 4(CSCW2), October 2020. **Honorable Mention**

Hamed Zamani, Bhaskar Mitra, Everest Chen, Gord Lueck, **Fernando Diaz**, Paul Bennett, Nick Craswell, and Susan Dumais. Analyzing and learning from user interactions for search

- clarification. In *Proceedings of the 43rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2020
- Asia J. Biega, Peter Potash, Hal Daumé III, **Fernando Diaz**, and Michèle Finck. Operationalizing the legal principle of data minimization for personalization. In *Proceedings of the 43rd Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2020
- Rishabh Mehrotra, James McInerney, Hugues Bouchard, Mounia Lalmas, and **Fernando Diaz**. Towards a fair marketplace: Counterfactual evaluation of the trade-off between relevance, fairness and satisfaction in recommendation systems. In *Proceedings of the 27th ACM conference on Information and knowledge management*, 2018
- Jean Garcia-Gathright, Brian St. Thomas, Christine Hosey, Zahra Nazari, and **Fernando Diaz**. Understanding and evaluating user satisfaction with music discovery. In *Proceedings of the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2018
- Rishabh Mehrotra, Amit Sharma, Ashton Anderson, **Fernando Diaz**, Hanna Wallach, and Emine Yilmaz. Auditing search engines for differential satisfaction across demographics. In *Proceedings of the 26th International Conference on World Wide Web*, 2017
- Omar Alonso, Serge-Eric Tremblay, and **Fernando Diaz**. Automatic generation of event timelines from social data. In *Proceedings of the 2017 ACM on Web Science Conference*, 2017
- Bhaskar Mitra, **Fernando Diaz**, and Nick Craswell. Learning to Match Using Local and Distributed Representations of Text for Web Search. In *Proceedings of the 26th International Conference on World Wide Web*, 2017
- Matthew Ekstrand-Abueg, Richard McCreadie, Virgil Pavlu, and **Fernando Diaz**. A study of realtime summarization metrics. In *Proceedings of the 25th ACM International on Conference on Information and Knowledge Management*, 2016
- Rahul Goel, Sandeep Soni, Naman Goyal, John Paparrizos, Hanna Wallach, **Fernando Diaz**, and Jacob Eisenstein. *The Social Dynamics of Language Change in Online Networks*. 2016
- Fernando Diaz**. Learning to rank with labeled features. In *Proceedings of the 2016 ACM International Conference on the Theory of Information Retrieval*, 2016
- Fernando Diaz**, Bhaskar Mitra, and Nick Craswell. Query expansion with locally-trained word embeddings. In *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics*, 2016
- Fernando Diaz**, Qi Guo, and Ryen W. White. Search result prefetching using cursor movement. In *Proceedings of the 39th International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2016
- Christopher Kedzie, **Fernando Diaz**, and Kathleen McKeown. Real-time web scale event summarization using sequential decision making. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence*, 2016
- Fernando Diaz**. Pseudo-query reformulation. In *Proceedings of the 38th European Conference on IR Research*, 2016
- Jaime Arguello, Sandeep Avula, and **Fernando Diaz**. Using query performance predictors to improve spoken queries. In *Proceedings of the 38th European Conference on IR Research*, 2016

- Fernando Diaz. Condensed list relevance models. In *Proceedings of the 2015 International Conference on The Theory of Information Retrieval*, May 2015
- Christopher Kedzie, Kathleen McKeown, and Fernando Diaz. Predicting salient updates for disaster summarization. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 1: Long Papers)*, July 2015
- Pavel Metrikov, Fernando Diaz, Sébastien Lahaie, and Justin Rao. Whole page optimization: How page elements interact with the position auction. In *EC '14: Proceedings of the fifteenth ACM conference on Electronic commerce*, 2014
- Alexandra Olteanu, Carlos Castillo, Fernando Diaz, and Sarah Vieweg. Crisislex: A lexicon for collecting and filtering microblogged communications in crises. In *Proceedings of The 8th International AAAI Conference on Weblogs and Social Media*, 2014
- Milad Shokouhi, Rosie Jones, Umut Ozertem, Karthik Raghunathan, and Fernando Diaz. Mobile query reformulations. In *Proceedings of the 37th Annual ACM SIGIR Conference*, 2014
- Peter B. Golbus, Imed Zitouni, Jin Young Kim, Ahmed Hassan, and Fernando Diaz. Contextual and dimensional relevance judgments for reusable serp-level evaluation. In *Proceedings of the 23rd International Conference on World Wide Web*, 2014
- Fernando Diaz, Ryen W. White, Georg Buscher, and Dan Liebling. Robust models of mouse movement on dynamic web search results pages. In *Proceedings of the 22nd ACM conference on Information and knowledge management (CIKM 2013)*, 2013
- Muhammad Imran, Shady Elbassuoni, Carlos Castillo, Fernando Diaz, and Patrick Meier. Extracting information nuggets from disaster-related messages in social media. In *10th International Conference on Information Systems for Crisis Response and Management*, 2013. **Best Paper**
- Qi Guo, Fernando Diaz, and Elad Yom-Tov. Updating users about time critical events. In Pavel Serdyukov, Pavel Braslavski, Sergei O. Kuznetsov, Jaap Kamps, Stefan Rüger, Eugene Agichtein, Ilya Segalovich, and Emine Yilmaz, editors, *Advances in Information Retrieval*, volume 7814. 2013
- Jaime Arguello, Fernando Diaz, and Jamie Callan. Learning to aggregate vertical results into web search results. In *Proceedings of the 20th ACM international conference on Information and knowledge management*, 2011
- Elad Yom-Tov and Fernando Diaz. Out of sight, not out of mind: on the effect of social and physical detachment on information need. In *Proceedings of the 34th international ACM SIGIR conference on Research and development in Information Retrieval*, 2011. **Best Paper Nomination**
- Elad Yom-Tov and Fernando Diaz. Location and timeliness of information sources during news events. In *Proceedings of the 34th international ACM SIGIR conference on Research and development in Information Retrieval*, 2011
- Jangwon Seo, Fernando Diaz, Evgeniy Gabrilovich, Vanja Josifovski, and Bo Pang. Generalized link suggestions via web site clustering. In *Proceedings of the 20th International Conference on World Wide Web*, 2011
- Jaime Arguello, Fernando Diaz, Jamie Callan, and Ben Carterette. A methodology for evaluating aggregated search results. In *Proceedings of the 33rd European conference on Advances in information retrieval*, 2011. **Best Student Paper**

- Jing Bai, **Fernando Diaz**, Yi Chang, Zhaohui Zheng, and Keke Chen. Cross-market model adaptation with pairwise preference data for web search ranking. In *Proceedings of the 23rd International Conference on Computational Linguistics: Posters*, 2010
- Fernando Diaz**, Donald Metzler, and Sihem Amer-Yahia. Relevance and ranking in online dating systems. In *SIGIR '10: Proceeding of the 33rd international ACM SIGIR conference on Research and development in information retrieval*, 2010. **ICML 2011 Invited Cross-Conference Presentation**
- Jaime Arguello, **Fernando Diaz**, and Jean-François Paiement. Vertical selection in the presence of unlabeled verticals. In *Proceedings of the 33rd international ACM SIGIR conference on Research and development in information retrieval*, 2010
- Anlei Dong, Ruiqiang Zhang, Pranam Kolari, Jing Bai, **Fernando Diaz**, Yi Chang, Zhaohui Zheng, and Hongyuan Zha. Time is of the essence: improving recency ranking using twitter data. In *WWW '10: Proceedings of the 19th international conference on World wide web*, 2010
- Anlei Dong, Yi Chang, Zhaohui Zheng, Gilad Mishne, Jing Bai, Ruiqiang Zhang, Karolina Buchner, Ciya Liao, and **Fernando Diaz**. Towards recency ranking in web search. In *WSDM '10: Proceedings of the third ACM international conference on Web search and data mining*, 2010
- Jaime Arguello, Jamie Callan, and **Fernando Diaz**. Classification-based resource selection. In *CIKM '09: Proceeding of the 18th ACM conference on Information and knowledge management*, 2009
- Ahmed Hassan, Rosie Jones, and **Fernando Diaz**. A case study of using geographic cues to predict query news intent. In *Proceedings of the 17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems*, 2009
- Jaime Arguello, **Fernando Diaz**, Jamie Callan, and Jean-François Crespo. Sources of evidence for vertical selection. In *Proceedings of the 32nd international ACM SIGIR conference on Research and development in information retrieval*, 2009. **Best Paper**
- Fernando Diaz** and Jaime Arguello. Adaptation of offline vertical selection predictions in the presence of user feedback. In *SIGIR 2009*, 2009
- Fernando Diaz**. Integration of news content into web results. In *Proceedings of the Second ACM International Conference on Web Search and Data Mining*, 2009. **Best Paper**
- Fernando Diaz**. Improving relevance feedback in language modeling with score regularization. In *SIGIR '08: Proceedings of the 31st annual international ACM SIGIR conference on Research and development in information retrieval*, 2008
- Fernando Diaz**. A method for transferring retrieval scores between collections with non-overlapping vocabularies. In *SIGIR '08: Proceedings of the 31st annual international ACM SIGIR conference on Research and development in information retrieval*, 2008
- Fernando Diaz**. Theoretical bounds on and empirical robustness of score regularization to different similarity measures. In *SIGIR '08: Proceedings of the 31st annual international ACM SIGIR conference on Research and development in information retrieval*, 2008
- Fernando Diaz**. Performance prediction using spatial autocorrelation. In *SIGIR '07: Proceedings of the 30th annual international ACM SIGIR conference on Research and development in information retrieval*, 2007
- Fernando Diaz** and Donald Metzler. Pseudo-aligned multilingual corpora. In Manuela M. Veloso, editor, *IJCAI 2007, Proceedings of the 20th International Joint Conference on Artificial Intelligence*, 2007

- Fernando Diaz and Donald Metzler. Improving the estimation of relevance models using large external corpora. In *SIGIR '06: Proceedings of the 29th annual international ACM SIGIR conference on Research and development in information retrieval*, 2006
- Fernando Diaz. Regularizing ad hoc retrieval scores. In *CIKM '05: Proceedings of the 14th ACM international conference on Information and knowledge management*, 2005
- Fernando Diaz and Rosie Jones. Using temporal profiles of queries for precision prediction. In *SIGIR '04: Proceedings of the 27th annual international ACM SIGIR conference on Research and development in information retrieval*, 2004
- Diane Kelly, Fernando Diaz, Nicholas J. Belkin, and James Allan. A user-centered approach to evaluating topic models. In *26th European Conference on Information Retrieval Research*, 2004
- Fernando Diaz. Using wearable computers to construct semantic representations of physical spaces. In *Proceedings of the Sixth International Symposium on Wearable Computers*, 2002

Journal

- J. Shane Culpepper, Fernando Diaz, and Mark D. Smucker. Research frontiers in information retrieval: Report from the third strategic workshop on information retrieval in lorne (swirl 2018). *SIGIR Forum*, 52(1), August 2018
- Alexandra Olteanu, Carlos Castillo, Fernando Diaz, and Emre Kiciman. Social data: Biases, methodological pitfalls, and ethical boundaries. *Frontiers in Big Data*, 2, 2017
- Ryen W. White, Fernando Diaz, and Qi Guo. Search result prefetching on desktop and mobile. *ACM Trans. Inf. Syst.*, 35(3), May 2017
- Fernando Diaz. Worst practices for designing production information access systems. *SIGIR Forum*, 50(1), June 2016
- Fernando Diaz, Michael Gamon, Jake Hofman, Emre Kiciman, and David Rothschild. Online and social media data as an imperfect continuous panel survey. *PLoS ONE*, 11(1), 2016
- Muhammad Imran, Carlos Castillo, Fernando Diaz, and Sarah Vieweg. Processing social media messages in mass emergency: A survey. *ACM Comput. Surv.*, 47(4), July 2015
- Fernando Diaz. Experimentation standards for crisis informatics. *SIGIR Forum*, 48(2), December 2014
- Daniel G. Goldstein, Siddharth Suri, R. Preston McAfee, Matthew Ekstrand-Abueg, and Fernando Diaz. The economic and cognitive costs of annoying display advertisements. *Journal of Marketing Research*, 51(6), December 2014. **Finalist: Paul E. Green Award**
- Hemant Purohit, Carlos Castillo, Fernando Diaz, Amit Sheth, and Patrick Meier. Emergency-relief coordination on social media: Automatically matching resource requests and offers. *First Monday*, 19(1), 2014
- Elad Yom-Tov and Fernando Diaz. The effect of social and physical detachment on information need. *ACM Trans. Inf. Syst.*, 31(1), January 2013
- Yi Chang, Anlei Dong, Pranam Kolari, Ruiqiang Zhang, Yoshiyuki Inagaki, Fernando Diaz, Hongyuan Zha, and Yan Liu. Improving recency ranking using twitter data. *ACM Trans. Intell. Syst. Technol.*, 4(1), February 2013

Fernando Diaz. Regularizing query-based retrieval scores. *Information Retrieval*, 10(6), December 2007

Rosie Jones and Fernando Diaz. Temporal profiles of queries. *ACM Trans. Inf. Syst.*, 25(3), July 2007

Chapter

Jaime Arguello and Fernando Diaz. *Relevance Ranking of Vertical Search Engines*, chapter Vertical Selection and Aggregation. 2013

Thesis

Fernando Diaz. *Autocorrelation and Regularization of Query-Based Retrieval Scores*. PhD thesis, University of Massachusetts Amherst, February 2008

Workshop

Sarah Bird, Solon Barocas, Kate Crawford, Fernando Diaz, and Hanna Wallach. Exploring or Exploiting? Social and Ethical Implications of Autonomous Experimentation in AI. In *Workshop on Fairness, Accountability, and Transparency in Machine Learning*, 2016

David Abel, Alekh Agarwal, Fernando Diaz, Akshay Krishnamurthy, and Robert E. Schapire. Exploratory gradient boosting for reinforcement learning in complex domains. In *ICML 2016 Workshop on Abstraction in Reinforcement Learning*, 2016

Fernando Diaz. Experimentation standards for crisis informatics. In *KDD 2014 Workshop on Data Science for Social Good*, 2014

Muhammad Imran, Shady Elbassuoni, Carlos Castillo, Fernando Diaz, and Patrick Meier. Practical extraction of disaster-relevant information from social media. In *Proceedings of the 2nd international conference on World Wide Web companion*, 2013

Annie Louis, Eric Crestan, Youssef Billawala, Rao Shen, Fernando Diaz, and Jean-François Crespo. Use of query similarity for improving presentation of news verticals. In *Proceedings of the First International Workshop on Searching and Integrating New Web Data Sources - Very Large Data Search, Seattle, WA, USA, September 2, 2011, 2011*

Rosie Jones, Ahmed Hassan, and Fernando Diaz. Geographic features in web search retrieval. In *Proceedings of the 2Nd International Workshop on Geographic Information Retrieval*, 2008

Donald Metzler, Fernando Diaz, Trevor Strohman, and W. B. Croft. Umass at robust 2005: Using mixtures of relevance models for query expansion. In *The Fourteenth Text REtrieval Conference (TREC 2005) Notebook*, 2005

Fernando Diaz and James Allan. When less is more: Relevance feedback falls short and term expansion succeeds at hard 2005 (notebook version). In *The Fourteenth Text REtrieval Conference (TREC 2005) Notebook*, 2005

Nasreen Abdul-Jaleel, James Allan, W. Bruce Croft, Fernando Diaz, Leah Larkey, Xiaoyan Li, Donald Metzler, Mark D. Smucker, Trevor Strohman, Howard Turtle, and Courtney Wade. Umass at trec 2004: Novelty and hard. In *Online Proceedings of 2004 Text REtrieval Conference*, 2004

Tutorial

- Praveen Chandar, **Fernando Diaz**, and Brian St. Thomas. Beyond accuracy: Grounding evaluation metrics for human-machine learning systems. In *Advances in Neural Information Processing Systems*, 2020
- Michael D. Ekstrand, Robin Burke, and **Fernando Diaz**. Fairness and discrimination in retrieval and recommendation. In *Proceedings of the 42Nd International ACM SIGIR Conference on Research and Development in Information Retrieval*, 2019
- Jean Garcia-Gathright, Christine Hosey, Brian St. Thomas, Ben Carterette, and **Fernando Diaz**. Mixed methods for evaluating user satisfaction. In *Proceedings of the 12th ACM Conference on Recommender Systems*, 2018
- Carlos Castillo, **Fernando Diaz**, and Hemant Purohit. Leveraging social media and web of data to assist crisis response coordination. In *SDM '14: Proceedings of the 14th SIAM International Conference on Data Mining*, 2014
- Kira Radinsky, **Fernando Diaz**, Susan Dumais, Milad Shokouhi, Anlei Dong, and Yi Chang. Temporal web dynamics and its application to information retrieval. In *Proceedings of the sixth ACM international conference on Web search and data mining*, 2013
- Fernando Diaz**, Jaime Arguello, and Milad Shokouhi. Integrating and ranking aggregated content on the web. In *WWW '12: Proceedings of the 21th international conference on World wide web*, 2012
- Fernando Diaz**, Mounia Lalmas, and Milad Shokouhi. From federated to aggregated search. In *SIGIR '10: Proceedings of the 33rd annual international ACM SIGIR conference on Research and development in information retrieval*, 2010

Patents

Granted

- Fernando Diaz**, D. Metzler, and S. Amer-Yahia. System for determining and optimizing for relevance in match-making systems, 2016. US Patent 9,449,282
- Fernando Diaz**. Predicting audience response for scripting, 2015. US Patent 9,159,031
- Y. Chang, Z. Zheng, **Fernando Diaz**, and J. Bai. Cross-market model adaptation with pairwise preference data, 2013. US Patent 8,489,590
- R. Jones, **Fernando Diaz**, and A.H. Awadallah. System and method of geo-based prediction in search result selection, 2013. US Patent 8,352,466
- Fernando Diaz**. System for integrating content from external corpora into primary search engine results, 2012. US Patent 8,150,874
- Rosie Jones and **Fernando Diaz**. System and method for providing temporal search results in response to a search query, 2009. US Patent 7,577,651

Applied

- V. Josifovski, E. Gabrilovich, B. Pang, **Fernando Diaz**, and J. Seo. Method or system for identifying website link suggestions, 2013. US Patent Application 13/339,142
- E. Yom-Tov and **Fernando Diaz**. Using user's social connection and information in web searching, 2012. US Patent Application 13/111,656

Recognition

Awards

British Computer Society Karen Spärck Jones Award, 2017
Finalist for Paul E. Green Award, Journal of Marketing Research, 2015
ISCRAM Best Paper Award, 2013
SIGIR Best Paper Nomination, 2011
ECIR Best Student Paper Award, 2011
SIGIR Best Paper Award, 2009
WSDM Best Paper Award, 2009

Fellowships and Chairs

Canada CIFAR AI Chair, 2019
UCLA Institute for Pure and Mathematics Postdoctoral Fellow, 2006
National Science Foundation Summer Institute in Japan, 2001
University of Massachusetts Opportunity Fellowship, 2000

Service

Organization

SIGIR, General Co-Chair, 2021
TREC Fair Ranking Track, Co-Organizer, 2019-2020
CIFAR Workshop on AI and the Curation of Culture, Co-Organizer, 2019
FAT*, Program Co-Chair, 2019
Strategic Workshop on Information Retrieval in Lorne, Co-Organizer, 2018
SIGIR, Awards Chair, 2014-2016
SIGIR Forum, Editor, 2012-2014
Workshop on Social Web for Disaster Management, Co-Organizer, 2015-2016
WSDM, General Co-Chair, 2014
TREC Web Track, Co-Organizer, 2013-2014
TREC Temporal Summarization Track, Co-Organizer, 2013-2014
NTCIR Recipe Search Track, Co-Organizer, 2014
SIGIR Workshop on Time-aware Information Access, Co-Organizer, 2012-2014
SIGIR Workshop on Social Web Search and Mining: Analysis of User Generated Content Under Crisis, Co-Organizer, 2011

Reviewing

SIGIR, SPC, 2011-2019
SIGIR, PC, 2008-2010
CIKM, PC, 2010-2011, 2014
CIKM, SPC, 2012
CIKM, Vice Chair, 2009
WSDM, PC, 2010-2011
WSDM, SPC, 2012-2018
WWW, PC, 2011-2014
WWW, Track Chair, 2017

Skills

Extensive programming C/C++ experience on Unix platforms. Moderate experience with audio programming on iOS. Extensive experience with production machine learning environments, including feature generation, model training, and evaluation. Experience with pytorch, GNU Scientific Library, Matlab/Octave, R, Python, Perl, Java, and scientific computing in a clustered environment. English and Spanish fluency. Some French.

References

Available on request.