Doris Jung-Lin Lee

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EDUCATION

Ph.D. Information Management and Systems, University of California, Berkeley   2019 - 2021
- Ph.D. Computer Science, University of Illinois, Urbana-Champaign (transferred)   2016 - 2019

B.A. Physics, Astrophysics, University of California, Berkeley   2013 - 2016

RESEARCH EXPERIENCE

Graduate Student Research Assistant at UC Berkeley	Aug 2019 - 2021
Research Intern at IBM Research Almaden	Summer 2019
Research Intern at Tableau Software	Summer 2018
Graduate Student Research Assistant at UIUC	Aug 2016 - May 2019
Lawrence Berkeley National Lab Scientific Data Management Group	Summer 2016
UC Berkeley AMP Lab Big Data Genomics Group	January 2016 - Aug 2016
UC Berkeley Hybrid Ecologies Lab	June 2014 - Aug 2016
Princeton Astrophysical Fluid Dynamics Group	Summer 2015
UC Berkeley Star Formation Theory Group	November 2014 - Aug 2016
University of Illinois Laboratory for Cosmological Data Mining	May 2014 - Jan 2016

PUBLICATIONS

Full Papers

[P13] **Doris Jung-Lin Lee**, Dixin Tang, Kunal Agarwal, Thyne Boonmark, Caitlyn Chen, Jake Kang, Ujjaini Mukhopadhyay, Jerry Song, Micah Yong, Marti A. Hearst, Aditya G. Parameswaran, Lux: Always-on Visualization Recommendations for Exploratory Dataframe Workflows, *48th International Conference on Very Large Data Bases (VLDB)*, 2022.

[P12] **Doris Jung-Lin Lee**, Vidya Setlur, Melanie Tory, Karrie Karahalios, Aditya Parameswaran, Deconstructing Categorization in Visualization Recommendation: A Taxonomy and Comparative Study, *IEEE Transactions on Visualization and Computer Graphics*, 2021

[P11] Stephen Macke, Hongpu Gong, **Doris Jung-Lin Lee**, Andrew Head, Doris Xin, Aditya Parameswaran Fine-Grained Lineage for Safer Notebook Interactions, *47th International Conference on Very Large Data Bases (VLDB)*, Aug 2021

[P10] Doris Xin, Eva Yiwei Wu, **Doris Jung-Lin Lee**, Niloufar Salehi, Aditya Parameswaran. Whither AutoML? Understanding the Role of Automation in Machine Learning Workflows, *ACM Transactions on Computer-Human Interaction (CHI)*, May 2021

[P9] Devin Petersohn, Stephen Macke, Doris Xin, William Ma, **Doris Lee**, Xiangxi Mo, Joseph E. Gonzalez, Joseph M. Hellerstein, Anthony D. Joseph, Aditya Parameswaran. Towards Scalable Dataframe Systems, *46th International Conference on Very Large Data Bases (VLDB)*, Sept 2020

[P8] Angela Lee*, Doris Xin*, **Doris Jung-Lin Lee***, Aditya Parameswaran. Demystifying a Dark Art: Understanding Real-World Machine Learning Model Development, *Workshop on Human-In-the-Loop Data Analytics (HILDA) at SIGMOD*, June 2020.

[P7] **Doris Jung-Lin Lee**, John Lee, Tarique Siddiqui, Jaewoo Kim, Karrie Karahalios, Aditya Parameswaran. You can't always sketch what you want: Understanding Sensemaking in Visual Query Systems, *IEEE Conference on Visual Analytics Science and Technology (VAST)*, October 2019.

[P6] Doris Jung-Lin Lee*, Stephen Macke*, Doris Xin*, Angela Lee, Silu Huang, Aditya Parameswaran. A Human-in-the-loop Perspective on AutoML: Milestones and the Road Ahead. *IEEE Data Engineering Bulletin*, Special Issue on Machine Learning Life-cycle Management, June 2019.

[P5] Doris Jung-Lin Lee, Himel Dev, Huizi Hu, Hazem Elmeleegy, Aditya Parameswaran. Avoiding the Drill-down Fallacy with VisPilot: Assisted Exploration of Data Subsets. *ACM Intelligent User Interface (IUI)*, Los Angelos, California, March 2019.

[P4] Doris Jung-Lin Lee, Aditya Parameswaran, The Case for a Visual Discovery Assistant: A Holistic Solution for Accelerating Visual Data Exploration. *IEEE Data Engineering Bulletin*, Special Issue on Insights and Explanations in Data Analysis, September 2018.

[P3] Doris Jung-Lin Lee, Joanne Lo, Moonhyok Kim, Eric Paulos, Crowdclass: Designing Classification-based Citizen Science Learning Modules. *The Fourth AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, Austin, Texas, November 2016.

[P2] Joanne Lo, **Doris Jung-Lin Lee**, Nathan Wong, David Bui, Eric Paulos, Skintillates: Towards Epidermal Interactions. *ACM Designing Interactive Systems (DIS)*, Brisbane, Australia, June 2016. **Honorable Mention.**

[P1] Laura Devendorf, Joanne Lo, Noura Howell, **Doris Jung-Lin Lee**, Nan-Wei Gong, M. Emre Karagozler, Ivan Poupyrev, Eric Paulos, Kimiko Ryokai, 'I don't Want to Wear a Screen': Probing Perceptions of and Possibilities for Dynamic Displays on Clothing. *ACM Transactions on Computer-Human Interaction (CHI)*, San Jose, USA, May 2016. **Best Paper Award.**

Short Papers/Poster/Demo

[W7] Doris Jung-Lin Lee, Abdul Quamar, Eser Kandogan, Fatma Ozcan, Boomerang: Proactive Insight-Based Recommendations for Guiding Conversational Data Analysis. *ACM SIGMOD International Conference on Management of Data*, June 2021.

[W7] Doris Jung-Lin Lee, Towards an Integrated Solution for Intelligent Visual Data Discovery. *Extended Abstracts of the Conference on Human Factors in Computing Systems (CHI)*, April 2020.

[W6] Doris Jung-Lin Lee, Jaewoo Kim, Renxuan Wang, Aditya Parameswaran, ScatterSearch: Visual Querying of Scatterplot Visualizations. *IEEE Conference on Information Visualization (InfoVis)*, Vancouver, Canada, October 2019.

[W5] Doris Jung-Lin Lee, Akash Das Sarma, Aditya Parameswaran, Aggregating Crowdsourced Image Segmentations. *The Sixth AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, Zurich, Switzerland, July 2018.

[W4] Edward W Huang, Sheng Wang, **Doris Jung-Lin Lee**, Runshun Zhang, Baoyan Liu, Xuezhong Zhou, ChengXiang Zhai. Framing Electronic Medical Records as Polylingual Documents in Query Expansion, *AMIA Annual Symposium Proceedings*. American Medical Informatics Association, 2017.

[W3] Doris Jung-Lin Lee, Jinda Han, Dana Chambourova, Ranjitha Kumar. Identifying Fashion Accounts in Social Networks. *In Proceedings of ACM KDD 2017 Machine learning meets fashion Workshop*, Halifax, Nova Scotia, August 2017.

[W2] Ling Jin, **Doris Jung-Lin Lee**, Alex Sim, Sam Borgeson, John Wu, Anna Spurlock, Annika Todd, Comparison of Clustering Techniques for Residential Energy Behavior using Smart Meter Data, *2nd International Workshop on Artificial Intelligence for Smart Grids and Smart Buildings* In conjunction with AAAI 2017.

[W1] Doris Jung-Lin Lee, Robert J. Brunner, Pattern Discovery and Large-Scale Data Mining on Cosmological Datasets. *6th Workshop on Algorithms for Modern Massive Data Set (MMDS)*, Berkeley, USA, June 2016.

Technical Reports

[**T2**] **Doris Jung-Lin Lee**, Aaron T. Lee, astroSim: Jupyter Notebook tutorials for running astrophysical simulations through the gravitational collapse of a magnetized, rotating sphere. [zenodo:59657]

[**T1**] **Doris Jung-Lin Lee**, Robert J. Brunner, Creating updated, scientifically-calibrated mosaic images for the RC3 Catalogue (2015) [arXiv:1512.01204].

PATENTS

- *Skintillates: Towards Epidermal Electronics Interactions.* Eric Paulos, Joanne Lo, Jung-Lin Lee, U.S. Provisional Patent Application No.62/174,735, June 2015.

- *Individually Addressable, Highly Efficient, Trifunctional Conductive Thread.* Eric Paulos, Kimiko Ryokai, Joanne Lo, Laura Devendorf, Jung-Lin Lee, Nan-Wei Gong, Karen Robinson, Ivan Poupyrev, June 2015.

AWARDS

- 2020 Facebook PhD Fellowship (Selected worldwide from over 1800 applications)

- ACM CHI 2020 Doctoral Symposium Selected Participant (24% acceptance rate)

- ACM IUI 2019 Travel Award Feb 2019

- CRA-W Grad Cohort Workshop Selected Participant and Travel Award Dec 2018

- UIUC Computer Science Excellence Fellowship Oct 2016

- ACM DIS 2016 Honorable Mention Award June 2016

- ACM CHI 2016 Best Paper Award May 2016

STUDENTS MENTORED

- Ujjaini Mukhopadhyay *(BS CS '22)* 2020-Present
- Kunal Agarwal *(BS CS '21)* 2020-Present
- Micah Yong *(BS CS '22)* 2020-2021
- Caitlyn Chen *(BS CS '21; Now Software Engineer at Stripe)* 2020-2021
- Jake Kang *(BS Business '21; Now Software Engineer at Microsoft)* 2020-2021
- Thyne Boonmark *(MIMS '21; Now Software Engineer at Walmart Labs)* 2019-2021
- Jerry Song *(BS EECS '20; MS EECS'21; Now Analyst at Goldman Sachs)* 2020-2021
- Jared Zhao *(BS CS '21; Now Cofounder of Polyture)* 2020
- Eva Wu *(MIMS '20; Now PhD student at University of Zurich)* 2019-2020
- Angela Lee *(BS CS '19; MS CS '20; Now Software Engineer at Google)* 2019-2020
- Jaewoo Kim *(BS CS '18; MS CS '20; Now Software Engineer at Amazon)* 2017-2020
- Huizi Hu *(BS CS '19; Now Graduate Student at UIUC)* 2017-2019
- Renxuan Wang *(MS CS'19; Now Software Engineer at Google)* 2018-2019
- Jintao Jiang *(BS CS '18; Now Graduate Student at UCLA)* 2018-2019
- Edward Xue *(MS CS '18; Now Software Engineer at Facebook)* 2017-2018
- Xu Yang *(MS IE '18; Now Software Engineer at Apple)* 2018
- Chaoran Wang *(MS CS '17; Now Software Engineer at Uber)* 2017
- Zhiwei Zhang *(BS CS '17; Now Software Engineer at DRW)* 2017
- Dana Chambourova *(BS CS'17; Now software engineer at Flexport)* 2017

PROFESSIONAL SERVICE

ACM IUI Paper Program Committee   2018-2020

Paper Reviewer:

    IUI 2017, TIIS 2018, CHI 2018, CHI 2019 (Case Studies), PacificVAST 2019,

    EuroVis 2019-2020, CHIPLAY 2019 (Work-in-Progress), TVCG 2019,

    IUI 2019 (Poster), TKDE 2020, VIS 2020, CSCW 2020, FACCT 2021

ACM SIGCHI Executive Committee Student Volunteer   2017

ACM XRDS Magazine News Editor   Nov 2014 - August 2016

Mentoring & Volunteering:

- UC Berkeley EECS Department PhD Admission Student Reviewing Committee (2021)
- UC Berkeley EECS Department PhD Admit Ambassador (2020-2021)
- UIUC CS Department Graduate Student Mentor (2018)
- UIUC CS Department PhD Admit Ambassador (2018, 2019)
- UIUC Mentoring Undergraduates in Science & Engineering (2017)
- Peer Mentor and Club Liaison for UC Berkeley Society of Physics Students (2015-2016)
- Volunteer and Summer Program Coordinator at UC Berkeley COMPASS Project (2013-2016)