

# Doris Jung-Lin Lee

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## EDUCATION

Ph.D. Information Management and Systems, University of California, Berkeley	2019 - Present
• 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 - Present
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

- [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 Angeles, 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, Crowclass: 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**, 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

- Micah Yong (*BS CS '22*) 2021-Present
- Ujjaini Mukhopadhyay (*BS CS '22*) 2020-Present
- Jake Kang (*BS Business '21*) 2020-Present
- Kunal Agarwal (*BS CS '21*) 2020-Present
- Caitlyn Chen (*BS CS '21*) 2020-Present
- Thyne Boonmark (*MIMS '21*) 2019-Present
- Jerry Song (*BS EECS '20; Now Graduate Student at UC Berkeley*) 2020-Present
- Jared Zhao (*BS CS '21; Now Cofounder of Polytur*) 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)
- 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)