Jung Lin (Doris) Lee

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

SKILLS High Performance Computing: C, C++, OpenMP, MPI, Fortran
Data Mining/Machine Learning: Python, Java, Bash, Scheme, IDL, SQL, ROOT
Others: Git, HTML, PHP, JavaScript, LaTeX, Mathematica,Matlab, LabView

EXPERIENCE

Berkeley Human-Computer Interaction Group June 2014 - Present

- Designing new educational interfaces to conventional citizen science crowdsourcing systems.
- Creating low-cost fabrication technique for on-skin wearable electronics.
- Collaborated with Google ATAP in Project Jacquard, a new e-textile technology.
- Developed a ferro-fluid sketching technique as a new interactive interface.
- Refined a fabrication pipeline for rapid prototyping PCB-like circuits.

University of Illinois Laboratory for Cosmological Data Mining May 2014 - Present

- Applying unsupervised machine learning algorithms to search for dark matter haloes in large-scale N-body cosmological simulations.
- Developed an adaptive algorithm that performs positional update on catalog sources for constructing a newer version of the RC3-cataloged galaxies. Designed a general software pipeline for creating scientifically-calibrated mosaics from large survey imaging datasets and an online database for accessing data products.

Berkeley Star Formation Simulation Research November 2014 - Present

- Investigating the effect of magnetic fields in protostar formation. Designing parallel, adaptive mesh refinement, magnetohydrodynamical simulations on supercomputers to track the evolution of a collapsing dense core.

Princeton Astrophysical Fluid Dynamics Group Summer 2015

- Constructed global, magnetohydrodynamical disk simulations on supercomputers for testing the new *Athena++* code. Explored the effects of Papaloizou-Pringle and magnetorotational instabilities on accretion disk torus.

PUBLICATIONS AND PATENTS

- Laura Devendorf, Joanne Lo, Noura Howell, **Jung Lin Lee**, Nan-Wei Gong, M. Emre Karagozler, Ivan Poupyrev, Eric Paulos, Kimiko Ryokai,"'I dont 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.
- Joanne Lo, **Jung Lin Lee**, Nathan Wong, David Bui, Eric Paulos,"Skintillates: Towards Epidermal Interactions". Submitted to *ACM Designing Interactive Systems (DIS)*, Brisbane, Australia, June 2016.
- **Jung Lin Lee**, Robert J. Brunner, "Creating updated, scientifically-calibrated mosaic images for the RC3 Catalogue"(2015) [arXiv:1512.01204].
- *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.