Le Liu

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Education

Ph.D. Candidate, Computer Science, Clemson University *08/2013 – Present*
- Advisor: Donald H. House
- GPA: 4.0/4.0

M.S., Computer Science, Clemson University *08/2010 – 12/2012*
- Advisor: Donald H. House
- GPA: 3.5/4.0

B. Eng., Computer Science, Chongqing University *09/2006 – 07/2010*
- GPA: 3.0/4.0

Publications

- **L. Liu**, M. Mirzargar, R.M. Kirby, R. Whitaker, and D. H. House. Visualizing time-specific hurricane predictions, with uncertainty, from storm path ensembles. *Computer Graphics Forum (Proceedings of EUROVIS '15)*, 34(3): 371–380, 2015.
- **L. Liu**, C. Yuksel, D. House. Uncertainty Visualization by Representative sampling from prediction ensembles. Accepted by *TVCG 2016*
- D. House, **L. Liu**, Re-envisioning hurricane predictions using ensemble displays. *IEEE Vis 2015 Workshop "Visualization for Decision Making Under Uncertainty".*
- Ian T. Ruginski, Alexander P. Boone, Lace M. Padilla, **Le Liu**, Nahal Heydari, Heidi S. Kramer, Mary Hegarty, William B. Thompson, Donald H. House, and Sarah H. Creem-Regehr. Understanding the cone of uncertainty: non-expert interpretations of hurricane forecast uncertainty visualizations. July 2015, Cognitive Science Society.

Relevant Experience

Software Engineer Intern, Virtroid Inc 05/2016 – 08/2016
Developing computer vision and computer graphics algorithms for stereo reconstructions of indoor scenes.

Research Assistant, Clemson University 08/2013 – Present
Visualizations of uncertainty in hurricane forecasts for proactive decision-making.
- Exploring novel visualization techniques to effectively enhance peoples' interpretations of hurricane forecasts and the underlying uncertainties.

Visualization Designer, Clemson University 12/2014 – 07/2015
Construction of a fully automated robotic system for simulating the assessment of soybean plants in a field. (Won the 4th place in the 2015 ASABE Robotic Competition)
- Designed an interactive visualization tool attached with a wireless data transfer system for analyzing and visualizing simulation data collected by the robotic system.

Visiting Scholar, Texas A&M University 01/2015 – 05/2015
Uncertainty visualizations by representative sampling from prediction ensembles.
- Developed a novel algorithm to select representative subsets from prediction ensembles.
- Designed visualizations to support explorations of the spatial distribution of the ensemble and the underlying uncertainties.

Research Assistant, Clemson University 08/2011 – 12/2012
Identifying target features in a layered stereoscopic display.
- Implemented an interactive system attached with a 3D eye tracking system for exploring human stereovision.

Professional Skills

Programming: C/C++, Processing2, Python, VTK, ParaView, OpenGL, Qt, gcc, Matlab
Platform: Linux CentOS and Ubuntu, Mac OS family, Windows family.