Stephanie Wang

Los Angeles, CA
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Education

2014-present **Ph.D. in Mathematics (expected Summer 2020)**, *UCLA*, 3.87.

received 2016 **M.S. in Mathematics**, *UCLA*.

2009-2013 **B.S. in Mathematics**, *National Taiwan University*, 3.64 *magna cum lauda*.

Research Experience

2016-present **PhD Study – under Prof. Joseph Teran**, *UCLA*, Los Angeles, CA.
Physics-based simulations for animation purposes. C++, convex and nonconvex optimization, numerical PDEs, numerical linear algebra, multithreading.

2019 summer **Summer Exchange – under Prof. Johan Gaume**, *EPFL*, Lausanne, Switzerland.
Physics-based simulations, post-processing, and data analysis of snow and tire interaction and consulting at the Snow and Avalanche Simulation Laboratory.

2013-2014 **Research Assistantship – under Prof. Wen-Wei Lin**, *NCTU*, Hsinchu, Taiwan.

Employment

2019 spring **Principal Instructor**, *UCLA Math Dept*, Los Angeles, CA.

2018 summer **Technology Intern**, *Walt Disney Animation Studio*, Burbank, CA.
R&D for pioneer simulation technology in animated feature film, teaming with FX artists, numerical analysis, continuum mechanics, C++, HDK.

2015-present **Teaching Assistant**, *UCLA Math Dept*, Los Angeles, CA.
Linear algebra, undergrad and grad level numerical methods, intro. and advanced C++ programming.

Skills

Programming C++, lua, MATLAB, vim, bash, LaTeX, Houdini, HDK, git, gdb, valgrind, Eigen, tbb, CVX

Mathematics Extensive coursework in optimization theory, numerical methods, differential equations, and numerical linear algebra.

Publications

Jul 2019 **S. Wang**, M. Ding, T. Gast, L. Zhu, S. Gagniere, C. Jiang, J. Teran, Simulation and Visualization of Ductile Fracture with the Material Point Method, ACM SIGGRAPH/Eurographics Symposium on Computer Animation (PACM-CGIT) **(Best Paper Awardee)**

Jul 2019 X. Han, T. Gast, Q. Guo, **S. Wang**, C. Jiang, J. Teran, A Hybrid Material Point Method for Frictional Contact with Diverse Materials, ACM SIGGRAPH/Eurographics Symposium on Computer Animation (PACM-CGIT)

Aug 2019 J. Carlen, J. Pont, C. Mentus, S. Chang, **S. Wang**, M. Porter, Role Detection in Bicycle-Sharing Networks Using Multilayer Stochastic Block Models, arXiv:1908.09440

(Oct 2019) I am the third author to a paper conditionally accepted to SIGGRAPH Asia 2019.

Miscellaneous

Languages English - Full to bilingual Proficiency; Mandarin Chinese - Native

Hobbies rock climbing, weight lifting, cooking