Chiyu "Max" Jiang

3D Deep Learning | Computer Vision | Self-driving Cars
maxjiang93@gmail.com | maxjiang.ml | 607.379.4895

EDUCATION

UC BERKELEY
Ph.D, Mechanical Engineering
May 2020 | Berkeley, CA
3D Deep Learning &
Physics-Informed Machine Learning
Advisor: Philip Marcus

CORNELL UNIVERSITY
B.S., Bio Engineering
Magna Cum Laude (GPA 3.948)
May 2015 | Ithaca, NY

ZHEJIANG UNIVERSITY
B.S., Bio Engineering
May 2015 | Hangzhou, China

LINKS

Site: maxjiang.ml
Github: maxjiang93
LinkedIn: maxcjiang

COURSEWORK

Computer Vision
Deep Reinforcement Learning
Parallel Computing
Introduction to Machine Learning
Finite Element Analysis
Spectral Methods for Fluid Dynamics
Advanced Fluid Mechanics I/II
Num Solution of Diff Eqn

SKILLS

Proficient :
Python (Tensorflow, PyTorch) •
C (CUDA/OpenMP/MPI) •
C++ • Bash • Matlab • LaTeX
Familiar :
html • css • Javascript

REFERENCE

Philip Marcus
Professor of Mechanical Engineering,
UC Berkeley
pmarcus@me.berkeley.edu

Matthias Nießner
Professor
Department of Informatics
Technical University of Munich
niessner@tum.de

WORK EXPERIENCE

CRUISE | SAN FRANCISCO, CA
June 2020 - Present | Senior Applied Research Scientist
- Successfully delivered and deployed a new generation 3D object detection solution, leading to a significant functional and latency improvement, resulting in increased safety of the car.

GOOGLE AI | MOUNTAIN VIEW, CA
May 2019 - Mar 2020 | Research Intern
- Developed novel learning based implicit 3D geometry representation for large-scale scene reconstruction from point clouds (2 pubs at CVPR).

LAWRENCE BERKELEY NATIONAL LABORATORY | BERKELEY, CA
June 2018 - Aug 2018 | Research Intern
Reseach on spherical CNNs for Computer Vision and Climate Science (pub at ICLR).

SELECT PUBLICATION

[1] C. Jiang*, J. Huang*, A. Tagliasacchi, and L. Guibas, "ShapeFlow: Learnable Deformations Among 3D Shapes," in *Advances in neural information processing systems (NeurIPS, Spotlight)*, 2020.

[2] C. Jiang*, S. Esmaeilzadeh*, K. Azizzadenesheli, K. Kashinath, M. Mustafa, H. Tchelepi, P. Marcus, Prabhat, and A. Anandkumar, "MeshfreeFlowNet: A Physics-Constrained Deep Continuous Space-Time Super-Resolution Framework," in *International Conference for High Performance Computing, Networking, Storage and Analysis (SC, Best Student Paper Nominate)*, 2020.

[3] C. Jiang, A. Sud, A. Makadia, J. Huang, M. Nießner, and T. Funkhouser, "Learning Local Implicit Grid Representation for 3D Scenes," in *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.

[4] J. Huang, J. Thies, A. Dai, A. Kundu, C. Jiang, L. Guibas, M. Niessner, and T. Funkhouser, "Adversarial Texture Optimization from RGB-D Scans," in *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.

[5] C. Jiang*, D. L. O. Lansigan*, P. Marcus, and M. Nießner, "DDSL: Deep Differentiable Simplex Layer for Learning Geometric Signals," in *IEEE International Conference on Computer Vision (ICCV)*, 2019.

[6] C. Jiang, J. Huang, K. Kashinath, Prabhat, P. Marcus, and M. Niessner, "Spherical CNNs on Unstructured Grids," in *International Conference on Learning Representations (ICLR)*, 2019.

[7] C. Jiang, D. Wang, J. Huang, P. Marcus, and M. Niessner, "Convolutional Neural Networks on Non-uniform Geometrical Signals Using Euclidean Spectral Transformation," in *International Conference on Learning Representations (ICLR)*, 2019.

AWARDS

2020	Best Student Paper Award (Nominate), SC20
2018	Chang-Lin Tien Graduate Fellowship, UC Berkeley
2017	The Frank and Margaret Lucas Scholarship, UC Berkeley
2017	Graduate Division Block Grant Award, UC Berkeley
2015-16	The Jonathan Laitone Memorial Scholarship, UC Berkeley
2013-15	Dean's List, CALS, Cornell University
2011-13	Scholarship for Academic Excellence, Zhejiang University
2011-13	Merit Student, Zhejiang University