# Chiyu "Max" Jiang

3D Deep Learning | Scientific Computing chiyu.jiang@berkeley.edu | maxjiang.ml | 607.379.4895

## **EDUCATION**

## **UC BERKELEY**

Ph.D, Mechanical Engineering

Expected May 2020 | Berkeley, CA

Advisor: Philip Marcus

## **CORNELL UNIVERSITY**

B.S., BIO ENGINEERING

May 2015 | Ithaca, NY

#### **ZHEJIANG UNIVERSITY**

**B.S., BIO ENGINEERING** 

May 2015 | Hangzhou, China

## IINKS

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 Egn

# 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**

## **GOOGLE AI**

#### MOUNTAIN VIEW, CA | RESEARCH INTERN

May 2019 - Aug 2019

3D Deep Learning & Scientific Computing Research internship at Google AI developing novel 3D computer vision algorithms.

## LAWRENCE BERKELEY NATIONAL LABORATORY

## BERKELEY, CA | DEEP LEARNING SUMMER INTERN

June 2018 - Aug 2018

Internship at Data Analytics group at NERSC supercomputing center. Developed novel algorithms for implementing CNNs on unstructured grids, with applications to panoramic image semantic segmentation and global climate pattern detection.

### UC BERKELEY | GRADUATE STUDENT INSTRUCTOR

Aug 2017 - Dec 2017 | CS294-73 Software Engineering for Scientific Computing

## **PUBLICATION**

- [1] 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),
- [2] C.Jiang, D. L. O.Lansigan, P.Marcus, and M.Nießner. DDSL: Deep Differentiable Simplex Layer for Learning Geometric Signals. arXiv preprint arXiv:1901.11082,
- [3] 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.
- [4] S.Oh, C.-H.Jiang, C.Jiang, and P. S.Marcus. Finding the optimal shape of the leading-and-trailing car of a high-speed train using design-by-morphing. Computational Mechanics, Oct 2017.
- [5] C.Jiang and P.Marcus. Hierarchical Detail Enhancing Mesh-Based Shape Generation with 3D Generative Adversarial Network. arXiv preprint arXiv:1709.07581, 2017.

# **AWARDS**

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