# Tiankui Zhang

PHD CANDIDATE IN PHYSICS, UNIVERSITY OF ARIZONA, TUCSON AZ, USA

☑ tiankuizhang@email.arizona.edu | 🄏 tiankuizhang.github.io | 🗘 tiankuizhang

#### Education

University of Arizona Tucson, AZ, USA

PHD CANDIDATE IN COMPUTATIONAL BIOPHYSICS, GPA: 4.0/4.0, EXPECTED TO GRADUATE IN JUL 2020

Aug 2014 - present

Sep 2010 - May 2014

• Advisor: Prof. Charles Wolgemuth

Wuhan University Wuhan, Hubei, PRC

BACHELOR OF SCIENCE IN PHYSICS, GPA: 3.85/4.0

Top-Notch Students Scientific Development Program (Physics)

• Advisor: Dr. Eugene Lim (King's College London)

King's College London London, UK

INTERNATIONAL STUDENT EXCHANGE PROGRAM

Sep 2013 - May 2014

### Experience \_\_\_\_\_

University of Arizona Tucson, AZ, USA

RESEARCH ASSITANT AND TEACHING ASSITANT

Aug 2014 - present

- Served as teaching assistant for various undergraduate physics and astronomy courses
- Developed a three dimensional massively parallel numerical framework for the simulation of single phase and biphasic vesicles coupled with protein kinetics with professor Charles W. Wolgemuth

#### Skills \_\_\_

• Chinese — native

• English — full professional proficiency

**computer** • Proficient in programming with Matlab, CUDA C/C++; Using python

• Numerical Methods for PDEs: finite difference, finite element, finite volume, level set method

**Applied Mathematics** 

- High Performance Computing: CUDA, OpenMP
- three years of experience in computational fluid dynamics, computational geometry

#### Publication

• Tiankui Zhang and Charles W Wolgemuth. Sixth-order accurate schemes for reinitialization and extrapolation in the level set framework. *Journal of Scientific Computing*, 83(2), 2020.

## Manuscripts \_\_\_\_\_

 Tiankui Zhang and Charles W Wolgemuth. Massively Parallel Simulation of Shape Dynamics of Single Phase and Biphasic Vesicles Coupled with Protein Kinetics.

#### Honors and Awards \_\_\_\_\_

2019 **top 10%**, College of Science Galileo Circle Scholarship

2014 **top 5%**, Honor Graduate Award of Hongyi School

2013 top 10%, CSC Visiting Student Scholarship

University of Arizona Wuhan University Wuhan University