# Tiankui Zhang

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

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#### Education

University of Arizona Tucson, AZ, USA

PHD IN COMPUTATIONAL BIOPHYSICS, GPA: 4.0/4.0

Aug 2014 - July 2020

• Advisor: Prof. Charles Wolgemuth

Wuhan University Wuhan, Hubei, PRC

BACHELOR OF SCIENCE IN PHYSICS, GPA: 3.85/4.0

Sep 2010 - May 2014

• 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 \_\_\_\_\_

**Glodon** Shang Hai, PRC

SOFTWARE DEVELOPMENT ENGINEER

Sep 2020 - now

• Develop algorithms to solve geometrical problems: MEP hidden line retreat, silhouette curves

University of Arizona Tucson, AZ, USA

RESEARCH ASSITANT AND TEACHING ASSITANT

Aug 2014 - Jul 2020

- 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 \_\_\_\_\_

**computer** • Proficient in programming with C++, Matlab, CUDA

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

**Applied Mathematics** 

- Computational geometry: solid modelling
- Theoretical Knowledge: physics, differential geometry

Languages

- Chinese native
- English full professional proficiency

#### **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. A general computational framework for the dynamics of single- and multi-phase vesicles and membranes.(submitted to Journal of Computational Physics, under review)

## 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