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: level set, finite volume

Applied Mathematics • Computational geometry: solid modelling

• Theoretical Knowledge: physics, differential geometry

• 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.
- **Tiankui Zhang** and Charles W Wolgemuth. A general computational framework for the dynamics of single- and multi-phase vesicles and membranes. (Journal of Computational Physics, in press)