

Tiankui Zhang

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

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Education

University of Arizona

PHD IN COMPUTATIONAL BIOPHYSICS, GPA: 4.0/4.0

- Advisor: Prof. [Charles Wolgemuth](#)

[Tucson, AZ, USA](#)

Aug 2014 - July 2020

Wuhan University

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)

[Wuhan, Hubei, PRC](#)

Sep 2010 - May 2014

King's College London

INTERNATIONAL STUDENT EXCHANGE PROGRAM

[London, UK](#)

Sep 2013 - May 2014

Experience

Glodon

SOFTWARE DEVELOPMENT ENGINEER

- Develop algorithms to solve geometrical problems: silhouette curves, mesh generation

[Shang Hai, PRC](#)

Sep 2020 - now

University of Arizona

RESEARCH ASSISTANT AND TEACHING ASSISTANT

- 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

[Tucson, AZ, USA](#)

Aug 2014 - Jul 2020

Skills

computer

- Proficient in programming with C++, Matlab, CUDA
- Numerical Methods for PDEs: level set, finite volume

Applied Mathematics

- Computational geometry: solid modelling, NURBS
- 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.
- **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*, Volume 450, 2022, 110815, ISSN 0021-9991.