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

ShangHai Xindi — *Shang Hai, PRC*

Senior Researcher — *Jun 2023 - Now*

- Develop feature commands for CAD software : offset curves, bridge surface, surface fairing, fit curve, boundary blend, draft offset

Glodon — *Shang Hai, PRC*

Software Development Engineer — *Sep 2020 - Jun 2023*

- Develop algorithms to solve geometrical problems: silhouette curves, facet

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

Applied Mathematics
- Numerical Methods for PDEs: level set, finite volume
- 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.