

JAEKWANG KIM

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EDUCATION

University of Illinois at Urbana-Champaign, IL
PhD in Theoretical and Applied Mechanics
Department of Mechanical Engineering

August 2018 - Present

University of Illinois at Urbana-Champaign, IL
M. S. in Theoretical and Applied Mechanics
Department of Mechanical Engineering

2016 - June 2018

Seoul National University, South Korea
B. S. in Naval Architecture & Ocean Engineering with the highest honors.

2009 - 2015

RESEARCH EXPERIENCE

Research Assistant at Admal Research Group
Numerical methods for grain evolution

2019 - Present

Research Assistant at Freund & Ewoldt Research Group
Uncertainty quantification in simulation predictions of complex fluids

2016 - 2018

Undergrad Research Intern at Marine Propeller laboratory
Shadow-graphic image analysis for ventilated super-cavities

2015 - 2016

PUBLICATION

J.B. Freund J. Kim, R. H. Ewoldt

Field sensitivity of flow predictions to rheological parameters, *Journal of Non-Newtonian Fluid Mechanics*, Vol 256, pp 71–82, 2018.

J. Kim, P. K. Singh, J.B. Freund R. H. Ewoldt

Uncertainty Propagation in Simulation Predictions of Generalized Newtonian Fluid Flows, *Journal of Non-Newtonian Fluid Mechanics*, Vol 271, 104138, 2019.

J. Kim, J. D. Park

The non-homogenous flow of a thixotropic fluid around a sphere,, *submitted*, preprint available at arxiv.

TECHNICAL SKILLS

Unix/Linux, Windows, C, C++, Python, Latex, Matlab, Mathematica, Bibtex, Pgfplot, Tecplot

TEACHING ASSISTANTSHIP

Introductory Solid Mechanics

Summer 2019

- Develop Undergrad level solid mechanics problems for computer based test system, *PrairieLearn*. Python, html, git, and docker is used.

- Lead laboratory session, grading laboratory reports and homeworks

AWARD

Graduation with Honors, Summa Cum Laude., *Ranked No.1 in the department*, President of Seoul National University, South Korea

National Science & Technology Scholarship, Ministry of Science and Technology, South Korea, 2012–2015.

Member of Seoul National University student honor society, STEM, 2013-

Excellence Award in Writing in Science&Technology, Dean of College of Engineering, Seoul National University, South Korea, 2013.

Excellence Award in Student Ship Design Competition, Society of Naval Architects, South Korea, 2013.

EXTRA-CIRRICULAR

Engineering Open House, a exhibitor of *Rheology zoo*, 2017, 2018

Exchange Student, Chemical Engineering Department, Monash University, Australia, 2014

Military Service, Korea Army Training Center, South Korea, 2010–2012