

# JAEKWANG KIM

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## EDUCATION

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**University of Illinois at Urbana-Champaign, IL**

*August 2018 - Present*

PhD in Theoretical and Applied Mechanics

Department of Mechanical Engineering

**University of Illinois at Urbana-Champaign, IL**

*2016 - June 2018*

M. S. in Theoretical and Applied Mechanics

Department of Mechanical Engineering

**Seoul National University, South Korea**

*2009 - 2015*

B. S. in Naval Architecture & Ocean Engineering

## RESEARCH EXPERIENCE

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**Research Assistant at Admal Research Group**

*2019 - Present*

Numerical methods for grain evolution

**Research Assistant at Freund & Ewoldt Research Group**

*2016 - 2018*

Uncertainty quantification in simulation predictions of complex fluids

**Undergrad Research Intern at Marin Propeller laboratory**

*2015 - 2016*

Shadow-graphic image analysis for ventilated super-cavities

## PUBLICATION

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**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 ??, pp ??–??, 2019.

## TECHNICAL SKILLS

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

## TEACHING ASSISTANTSHIP

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**Introductory Solid Mechanics**

*Summer 2019*

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

**Fundamentals of Fluid Dynamics**

*Spring 2019*

- Lead laboratory session, grading laboratory reports and homeworks

## ACADEMIC ACHIEVEMENTS

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**Graduation with Honors, Summa Cum Laude.**, *Ranked No.1 among 36 graduates in the department* President of Seoul National University, South Korea

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

**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**

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

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