

Rundong Zhou

Curriculum Vitae

Contact Information

Email: rundongz@chalmers.se

Phone: +46 734809317

Website: rundong-zhou.github.io

Research Interest:

Computational physics, Fluid mechanics, Dynamical system, Numerical methods,
Physical oceanography and Atmospheric Science

EDUCATION

Bachelor of Applied Science in Engineering Science

2021

Major in Engineering Physics

Major GPA 3.59

University of Toronto

Toronto, Canada

Candidate for **Master of Science**

expected 2024

Major in Complex Adaptive Systems

Chalmers University of Technology

Gothenburg, Sweden

PUBLICATIONS

Zhou, R., Grisouard, N. *A Fourier-Bessel based spectral Laplacian solver using discrete Hankel transform*. Submitting to Journal of Computational Physics. 2022.

HONOURS AND AWARDS

Avancez Scholarship

2022

Chalmers University of Technology

- 75% tuition fee reduction.

Undergraduate Research Fellowship

2018

Canadian Institute for Theoretical Astrophysics

- C\$ 2000 per month for four months.

Dean's Honour List

2015 Fall

University of Toronto

2016 Fall

- Pass with >80% average.

2020 Fall

2021 Winter

RESEARCH EXPERIENCE

Undergraduate Thesis

September 2020 - April 2021

Department of Physics, University of Toronto

Toronto, Canada

Supervisor: Prof. Nicolas Grisouard

- A novel spectral method to solve fluid equations in polar coordinates.

Summer Undergraduate Research Program

May - September 2018

Canadian Institute for Theoretical Astrophysics

Toronto, Canada

Supervisor: Prof. Norm Murray

- Data analysis on Galactic Legacy Infrared Midplane Survey Extraordinaire (GLIMPSE) database.

Research Assistant

April 2021 - Present

Department of Physics, University of Toronto

Supervisor: Prof. Nicolas Grisouard

- A novel Fourier-Bessel based spectral method using discrete Hankel transform.

Research Assistant

January - April 2022

Department of Mechanical Engineering, University of Ottawa

Supervisor: Prof. Natalie Baddour

- Developing a new type of 2-D discrete Fourier transform in polar coordinates using Dini series.

PROFESSIONAL EXPERIENCE

Intern Technical Interpreter

October - December 2019

Baoshan Iron & Steel Co., Ltd., and PMC-Colinet Industries

Shanghai, China

Supervisor: Marcello Mameli

- English and Mandarin. RPP07-3 CNC Pipe Finishing Machine bearing replacement and refurbishment project at Baoshan Iron & Steel Co., Ltd..