Rundong Zhou
Curriculum Vitae

Contact Information
Email: rundongz@chalmers.se **Phone:** +46 734809317
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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 3.59/4.00
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. and Grisouard, N. *Spectral solver for Cauchy problems in polar coordinates using discrete Hankel transforms.* Under review for the Journal of Computational Physics. arXiv:2210.09736

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, 2016 Fall
University of Toronto 2020 Fall, 2021 Winter
- Pass with >80% average.

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..