Rundong Zhou
Curriculum Vitae

Contact Information
Email: rundongz@chalmers.se
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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
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.* Submitted to 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
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..