

Ricardo Roopnarinesingh

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Curriculum Vitæ

Experience

Vocational

- August 2021- Present **Research Assistant**, *University of Colorado Boulder*, Boulder, CO.
Working in a Computational Fluids Lab under Dr. Debanjan Mukherjee. Developing patient-specific computational fluid-particle transport models of arterial stroke to map most probable stroke source in a biofluids centered lab.
- Dec 2019- May 2021 **Research Assistant**, *Oklahoma State University*, Stillwater, OK.
Worked in Fluids Lab under Dr. Arvind Santhanakrishnan. Designed, manufactured, and tested robotic models mimicking wake patterns of metachronal locomotion in crustaceans in an experimental fluids lab.
- Jan-May 2019 **Research Assistant**, *Oklahoma State University*, Stillwater OK.
Worked in HVAC Lab under Dr. Christian Bach. Implemented parts and sub-designs of a heat exchanger testing facility.

Miscellaneous

- June-Aug 2020 **Power Distribution Intern**, *NextEra Energy*, Fort Myers, FL.
Completed maintenance, upgrades, and design of the Florida Power and Light power network
- August 2019- May 2021 **Academic Tutor**, *Oklahoma State College of Engineering*, Stillwater OK.
Tutored peers in engineering and mathematics related subjects and projects
- August 2018- May 2019 **Academic Tutor**, *Oklahoma State LASSO Center*, Stillwater, OK.
One-on-one tutoring with Oklahoma State students

Education

Degrees

- 2021-Present **PhD in Mechanical Engineering**, *University of Colorado Boulder*, Boulder, CO.
 - Advisor: Debanjan Mukherjee
- 2017-2021 **BS in Mechanical Engineering**, *Oklahoma State University*, Stillwater, OK.
GPA: 3.96/4.0

Awards and Activities

August 2020- **Wentz Research Scholar**, *Oklahoma State University*, Stillwater OK.
May 2021

Jan 2020- **Tau Beta Pi Honor Society**, *Oklahoma State University* Stillwater OK.
May 2021

August 2017- **OKstate Symphonic Orchestra**, *Oklahoma State University*, Stillwater, OK.
May 2019

Abstracts/Presentation

1. Roopnarinesingh, Ricardo, Michelle Leppert, and Debanjan Mukherjee. "Evidence And Mechanisms For Embolic Stroke In Contralateral Hemispheres From Carotid Artery Disease." *medRxiv* (2023): 2023-04.
2. Roopnarinesingh, R., Mukherjee, D., Leppert. M., Jani, N. Quantification of Embolus Transport to the Brain From Carotid Stenosis Sites. *Summer Biomechanics, Bioengineering and Biotransport Conference, Vail, CO, June 2023*
3. Roopnarinesingh, R., Mukherjee, D., Leppert. M. Parametric Investigation on Stroke Risks from Carotid Artery Disease. *American Physical Society's Division of Fluid Dynamics, Indianapolis, IN, November 2022*
4. Roopnarinesingh, R., Mukherjee, D. In Silico Investigation of Contralateral Embolic Stroke Risks from Carotid Artery Disease. *Summer Biomechanics, Bioengineering and Biotransport Conference, Cambridge, MA, June 2022*

References

Dr. Debanjan Mukherjee, *University of Colorado Boulder*, Boulder, CO.
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Dr. Arvind Santhanakrishnan, *Oklahoma State University*, Stillwater, OK.
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Dr. Ehsan Moallem, *Oklahoma State University*, Stillwater, OK.
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