

Scott J. Hymel

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Education:

PhD, Biomedical Engineering, Tulane University, New Orleans, LA 2015 - Present

M.S., Biomedical Engineering, Tulane University, New Orleans, LA 2013 – 2015

B.S., Mechanical Engineering, University of New Orleans, New Orleans, LA 2008 – 2013

Certified E.I. (Engineering Intern)

Related Coursework:

- Computational Fluid Dynamics (CFD)
- Computational Modeling of Biomedical Systems
- Finite Element Analysis (FEA)
- Transport in Cell and Organs
- Technical Writing
- Fluid Mechanics
- Fundamentals of Mathematical Modeling and Analysis of Biological Systems
- Viscous Flow in Biology
- Anatomy and Physiology with cadaver lab
- Oral Communications

Work Experience:

Research Assistant, Cellular Biomechanics and Biotransport Lab: Spring 2014 to Present

Dr. Damir Khismatullin, Tulane University, New Orleans, LA 70118

- Performed computational simulations of leukocyte migration in a bifurcation channel at different bifurcation angles for single cell and interactions of multiple cells.
- Working on computational simulations of passive migration simulations in a multiple grooved and pillar channel varying the number and separation between them.
- Working on computational model of atherosclerotic patient-specific carotid bifurcations for both asymptomatic and symptomatic with 80% stenosis or greater.

Organizations and Other Experience:

- Member of ASME (American Society of Mechanical Engineers) since 2009
- Member of LES (Louisiana Engineering Society) since 2009
- Member of BMES since Fall 2013
- Member of the Order of the Engineer since Spring 2013
- Judge for FIRST Competitions (FLL – December 2013,2014,2015,2016 and FRC – April 2014 and 2016)
 - FLL – FIRST Lego League and FRC – FIRST Robotics Competition

Technical Skills:

- C/C++
- Matlab
- COMSOL
- Fortran
- ANSYS
- Fluent
- PETSc
- ABAQUS
- OpenMP/MPI
- SolidWorks