

Mohammad Jamali

3010 Hanes ave, Richmond, Virginia 23222
Cell: (804)869-0402; Email: m.jamali2007@gmail.com

SUMMARY

- Demonstrated problem-solving ability in fluid and solid mechanics.
- Experienced in multi-phase flow and heat transfer modeling and complementary experiment.
- Proficient in Computational Fluid Dynamics (CFD) and designing experimental setup.

PROFESSIONAL EXPERIENCE

Graduate Research and Teaching Assistant, Virginia Commonwealth University *May 2016-Present*

- Developed an analytical solution for droplet mobility and adhesion on superhydrophobic surfaces based on numerical and experimental studies.
- Produced a surface made of nonwoven fibers using electrospinning method for low droplet mobility.
- Developed predictive models and experimental approach for numerous fluid–surface interactions, e.g., droplet motion and penetration into fibrous surfaces.
- Authored/co-authored 6 journal articles.
- Reviewer of Journal of Engineered Fibers and Fabrics.

Graduate Research and Teaching Assistant, Iran University of Science and Technology *Sep 2013-Sep 2015*

- Investigated water entry of spheres experimentally along with an analytical study.
- Proposed a new method for analyzing heat transfer and entropy generation of nanofluid flows.
- Conducted research for several course projects including CFD simulation of the lid-driven cavity problem with SIMPLE method by Fortran code, numerical simulation of flow over a flat plate, design of Francis Turbine 3D by Catia.
- Experienced with Fluent, Gambit, Fortran, Solid Works and Catia.
- Authored/co-authored 3 journal articles.

Research Assistant, Shiraz University

Feb 2013-Sep 2013

- Simulated ventilation of a subway environment using a developed code.
- Conducted research for HVAC system of Mofateh Dormitory by Carrier.
- Experienced with C++ and C.

TECHNICAL AND EXPERIMENTAL SKILLS

- **Experimental:** Electrospinning, Imaging (optical and SEM).
- **Engineering Packages:** Fluent, Matlab, Surface Evolver, Mathematica, Gambit, Solid Works and Catia.
- **Programming Languages:** C++, C, Fortran.

HONORS AND AWARDS

- Received *first-place poster award* at The American Filtration and Separations Society *April 2019*
Filtration Conference
- Received *Special Achievement Award* from The Nonwoven Institute at NC state University *May 2018*
- Ranked 1st among Energy Conversion students at Iran University of Science and *May 2016*
Technology. Received straight admission PhD offer in Energy Conversion at Iran University of Science and
Technology (exemption from competitive PhD national exam).
- Top 0.5% of B.Sc. nationwide entrance exam of Iranian University with nearly 400000 participants *Sep 2009*

EDUCATION

- **PhD in Mechanical & Nuclear Engineering** *May 2016–2019*
Virginia Commonwealth University
- **MS in Mechanical Engineering** *Sep 2013–Sep 2015*
Iran University of Science and Technology, Tehran, Iran
- **BS in Mechanical Engineering** *Sep 2009–Aug 2013*
Shiraz University, Shiraz, Iran