NAME

Phone
Email
website

RESEARCH INTERESTS

- **Mathematical Modeling of Multiphysics and Biological Systems:** Polymer Networks, Biological Structures, Granular Materials, Electro- (Magneto-) elastic Materials, Heterogeneous Media, Fluid-Structure Interactions, Instability/Bifurcation Analysis
- **Scientific Computing:** General Purpose GPU Computing, High-Performance Computing, Numerical Methods
- **Computer Graphics:** Physically-based Animations, 3D Modeling & Numerical Geometry, Rendering and Global Illumination

EDUCATION

- **University of Pennsylvania**, Philadelphia, PA, 12/20XX
  PhD Candidate in **Mechanical Engineering and Applied Mechanics**, GPA 3.92.
  Adviser: Name
  Dissertation Title: "title."
- **Sharif University of Technology**, Tehran, Iran, 20XX
  BSc Degree in **Mechanical Engineering** and **Physics**, GPA 18.02/20.

AWARDS

- **Honorable Mention** for the poster presentation in ASME International Mechanical Engineering Congress and Exposition, 2011, Denver Colorado.
- **NSF Travel Award** to attend ASME International Mechanical Engineering Congress and Exposition, 20XX, Denver Colorado.
- **Silver Medal**, 34th International Physics Olympiad, 20XX, Taiwan.
- **Gold Medal**, 15th National Physics Olympiad, 20XX, Iran.

JOURNAL PUBLICATIONS

- Names. "A finite-strain constitutive theory for electro-active polymer composites via homogenization." 20XX International Journal of Non-Linear Mechanics, Vol 47, pp 293-306.
- Names. "A magnetically anisotropic, ellipsoidal inclusion subjected to a non-aligned magnetic field in an elastic medium." 20XX Comptes Rendus Mecanique, Vol 30, pp 205-218.
- Names. "Electro-active polymers in the limit of infinitesimal deformations." 20XX Philosophical Magazine, Vol 93, pp 2769-2801.
- Names. "Fiber-constrained, dielectric-elastomer composites: Finite-strain response and Stability analysis." 20XX Journal of the Mechanics and Physics of Solids, Vol 68, pp 211-238.
- Names. "Electro-mechanical instabilities in fiber-constrained, dielectric-elastomer composites subjected to all- around dead loading." 20XX to be appeared in Mathematics and Mechanics of Solids.

CONFERENCE PAPERS/ POSTERS

- Names, “Dilute Estimates for Magneto-Rheological Elastomers at Small Strains and Rotations.” The 16th US National Congress of Theoretical and Applied Mechanics, Pennsylvania State University, University Park, PA, June 27 – July 2, 20XX.
- Names, “Homogenization-based constitutive models for electro-active polymers.” ASME International Mechanical Engineering Congress and Exposition, Denver, CO, November 11 – 17, 20XX.
- Names, “Hashin Shtrictman Estimates for Magneto-Rheological Elastomers.” ASME International Mechanical Engineering Congress and Exposition, Denver, CO, November 11 – 17, 20XX.
- Names, “On the macroscopic response of deformable dielectric composites and applications to electrostriction.” The 49th Annual Technical Conference of the Society of Engineering Science, Georgia Institute of Technology, Atlanta, GA, October 10 – 12, 20XX.
- Names, “Dielectric-elastomer composites with fibrous microstructures: Finite strain response and stability analysis.” 17th US National Congress on Theoretical and Applied Mechanics East Lansing, MI, June 15 – 20, 20XX.

TEACHING EXPERIENCE

Invited Speaker (@ The Franklin Institute)

- Introduction to Computer Science: A Python Tutorial, May 20XX, for the Early Access to Graduate Research of Philadelphia.

Teaching Assistant (@ UPenn)

- Introductory Mechanics Lab (Fall 2010), Thermodynamics (Spring 2010), and Introduction to Scientific Computing (Fall 2009).

COMPUTER SKILLS

- **Programming:** C++[advanced], Matlab[advanced], Maple[advanced], CUDA C [advanced], OpenGL[intermediate], Python[intermediate].
- **Typesetting:** Latex[advanced], LibreOffice.org Writer[advanced], Microsoft Word[advanced].
- **Operating Systems**: Linux, MacOsX, Windows.

RELEVANT COURSEWORK

- **Scientific Computing:** Heterogeneous Parallel Programming (www.Coursera.org); Introduction to Parallel Programming (www.Udacity.org); Computational Mechanics (Penn); High Performance Computing & Numerical Linear Algebra (GaTech); Computational Physics, CFD & FEM (Sharif University)
- **Mathematical Modeling of Multiphysics Systems:** Composite Materials, Rods and Shells & Non-equilibrium Thermodynamics (Penn); Statistical Physics, Quantum Physics, Electromagnetism (Sharif University)
- **Computer Graphics:** Introduction to 3D Computer Graphics (www.Udacity.org); GPU Programming and Architecture (Penn)

EXTRA-CURRICULAR ACTIVITIES

- Origami
- Swimming, Squash, and Chess
- Web development and WebGL