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| Jason Larkin  jmlarkin@andrew.cmu.edu | | | 412-398-8813  4763 Sherwood Dr, Pittsburgh, PA 15236 | |
| Education | | | | |
|  | Carnegie Mellon University, Pittsburgh, PA **Ph.D., Mechanical Engineering** GPA: 3.7 **Fall 2009-present**  **-Research:** Molecular Modeling of Phase Change Memory Materials  **-Coursework:** Molecular Simulation, Solid State Physics, Quantum Chemistry, Electronic Structure, N Numerical Methods. University of Pittsburgh, Pittsburgh, PA | | | |
| M.S. Mechanical Engineering GPA: 3.7 | | | 2007-2009 |
| **-Thesis:** Statistics of Particle Concentrations in Free-Surface Turbulence  **-Coursework:** Quantum Mechanics, Statistical Mechanics, Advanced Fluid Mechanics, Turbulence, C C Chaos and Nonlinear Phenomena, Linear and Nonlinear Elasticity.  **-Funding:** NSF Research Grant Graduate Student Researcher. | | | |
| **B.S. Mechanical Engineering** GPA: 3.2  **2003-2007** | | | |
| -Research: FEA modeling of novel flow chamber for studying the initiation and development of C C Cccerebral aneurysms.  -Coursework: Focus in fluids. | | | |
| Teaching Experience | | | | |
|  | | University of Pittsburgh | |  |
| Teaching Assistant – Advanced Fluid Mechanics | | 2008 |
| Topics in Fluid Mechanics including viscous flow, boundary layer theory, and scale similarity.  **Lab Instructor –** Physics Lab **2007-2009** Supervised undergraduate research experiments ranging from turbulence and fluid mechanics to elasticity and fracture. Taught skills in programming, automation, and fluid dynamics measurements. | | |
| Lecturer – Physics | | 2007-2009 |
| Administered lectures to undergraduate students, graduate students, and faculty on topics ranging from Mathematics, Turbulence, Bio-Physics, Statistical and Thermal Physics, and general Nonlinear Phenomena. | | |
| Publications and papers | | | | |
|  | | * J. Larkin, W. Goldburg, M.M. Bandi, “Time-Evolution of a fractal distribution: Particle concentrations in free-surface turbulence”, *Physica D* (2009, in press). * J. Larkin, M.M. Bandi, A. Pumir, W. Goldburg , “Power-law distributions of particle concentration in free-surface flows”, *Phys. Rev. E* **80**, 066301 (2009). * J. Larkin, W. Goldburg, “Decorrelating a Compressible Turbulent Flow: an Experiment”, *Phys. Rev. E*, (submitted). | | |
| selected Presentations (6 total) | | | | |
|  | | * “Decorrelating a Compressible Turbulent Flow: An Experiment”, J. Larkin, W. Goldburg (speaker). 2010 American Physical Society March Meeting Portland, OR. * “Statistics of Preferential Particle Concentration in Free-Surface Turbulence”, J. Larkin (speaker), M.M. Bandi, W. Goldburg. 2009 American Physical Society March Meeting Pittsburgh, PA. * “The Generalized Fractal Dimensions of a 2-D Compressible Turbulence”, J. Larkin (speaker), M.M. Bandi, W. Goldburg. 2008 American Physical Society March Meeting New Orleans, LA. | | |
| Memberships | | | | |
|  | | * American Physical Society * American Society of Mechanical Engineers * Society for Industrial and Applied Mathematics | | |