

# Robert D. Schroll

## Experience

- Data Scientist in Residence, *The Data Incubator* 3/2016–Present  
Developed and improved teaching modules on topics in machine learning and data science  
Taught about 200 students per year, assisting their transition into industry  
Maintained and extended backend tools for application process and fellow management  
Ran corporate trainings to provide data science knowledge for specific business needs
- Fellow, *The Data Incubator* 1/2016–2/2016
- Open-source Software Development 2009–Present  
Re-designed email representation and user interface for the [Geary](#) mail client  
Developed [LiTeX](#), [Reflow](#), and [Spelling](#), plugins for the [LightTable IDE](#)  
Wrote GTK backend and improved API for the [Visvis](#) Python plotting library
- Postdoctoral Researcher, *Universidad de Santiago de Chile* 1/2012–12/2013  
Applied self-designed numerical code to several problems in the elasticity of thin sheets
- Postdoctoral Researcher, *University of Massachusetts, Amherst* 8/2009–12/2011  
Developed adaptive multi-grid simulation of thin elastic sheets
- PhD in Physics, *University of Chicago* 9/2003–7/2009  
Simulated drop impact with volume-of-fluid code; found agreement with experiments  
Discovered and analyzed a novel mechanism of flow driven by light scattering
- BS in Physics, BS in Math, *University of Maryland* 9/1999–5/2003  
Graduated *summa cum laude*, completing Honors and Gemstone programs.
- Languages:* Python, C, C++, Vala, Scala, Bash, MATLAB, Mathematica,  $\LaTeX$ , FORTRAN  
*Frameworks:* Spark (Scala and pySpark), MapReduce on Hadoop, Scikit Learn  
*Web Technologies:* HTML, CSS, Javascript, Clojurescript, Bootstrap, Flask

## Honors and Awards

- FONDECYT Postdoctoral Project Award 2011–2013
- National Science Foundation Graduate Research Fellowship 2003–2006
- University System of Maryland Regents' Scholarship 1999–2003
- Maryland Distinguished Scholar Scholarship 1999–2003
- Maryland Senior Summer Scholars Grant 2001

## Selected Publications

- Capillary deformations of bendable films. Robert D. Schroll, Mokhtar Adda-Bedia, Enrique Cerda, Jiangshui Huang, Narayanan Menon, Thomas P. Russell, Kamil B. Toga, Dominic Vella, and Benny Davidovitch. *Phys. Rev. Lett.* **111**, 014301 (2013).
- Impact of a viscous liquid drop. Robert Schroll, Christophe Josserand, Stéphane Zaleski, and Wendy Zhang. *Phys. Rev. Lett.* **104**, 034504 (2010).
- Liquid transport due to light scattering. Robert D. Schroll, Régis Wunenburger, Alexis Casner, Wendy W. Zhang, and Jean-Pierre Delville. *Phys. Rev. Lett.* **98**, 133601 (2007).