

Jonathan Goldfarb

Department of Mathematical Sciences
Florida Institute of Technology
150 W. University Blvd
Melbourne, FL 32901

- Phone: +1 (321) 895 4184
- Email: jgoldfar@my.fit.edu
- <http://jgoldfar.github.io>

Education

Florida Institute of Technology
PhD, Applied Mathematics

Melbourne, FL
2009–2016 (Expected)

Florida Institute of Technology
BS, Environmental Sciences

Melbourne, FL
2005–2009

Experience

Florida Institute of Technology
Graduate Student Assistant

Melbourne
Fall 2009–Summer 2012, Fall 2015–Spring 2016

- Worked in: Calculus 1 (TA coordinator) and Calculus 2 • Differential Equations with Linear Algebra • Introduction to PDE • Models in Applied Math • Applied Statistical Analysis • Probability and Statistics • Applied Discrete Math • Theory of Stochastic Processes
- Cofounder and president of Florida Tech SIAM Student chapter, 2012–2014.
- Developed materials for computational math labs.

Florida Institute of Technology
Instructor

Melbourne
Fall 2012–Spring 2015

- Taught Algebra, Calculus, Introduction to PDE, and Statistics courses.
- SIAM Southeastern Atlantic Section conference organizer under chair Dr. Ugur Abdulla.

Florida Tech REU in PDEs and Dynamical Systems
Graduate Mentor

Melbourne
Summer 2014, Summer 2015

- Completed research and mentored students on advanced level material.
- Generated numerical codes and documents for groups working in Nonlinear PDEs, Inverse Free Boundary Problems, and Dynamical Systems and Chaos Theory
- Created website and application management system under <http://math.reu.fit.edu>

Core Skills

Platforms: Linux, Unix, and Windows

Tools & Libraries: IDV, Grads, Gempak, Mathematica, MATLAB, R, PETSc, Sage, ViSit

Languages: C, C++, C#, FORTRAN, IDL, JavaScript, Julia, L^AT_EX, Perl, PHP, Python, SQL

Research Interests and Topics

PDE: Inverse problems, mathematical physics and modeling, qualitative theory for nonlinear equations, free boundary problems, control problems, degenerate and non-uniformly parabolic equations

Optimization, Functional Analysis, Numerical Methods and Algorithm Development, and Geophysical Fluid Dynamics.

Publication/conference talks and more details in my CV at <http://jgoldfar.github.io/media/cv.pdf>.