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 **Melbourne, FL**
PhD, Applied Mathematics *2009–2016 (Expected)*

Florida Institute of Technology **Melbourne, FL**
BS, Environmental Sciences *2005–2009*

Experience

Florida Institute of Technology **Melbourne**
Graduate Student Assistant *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 Tech REU in PDEs and Dynamical Systems **Melbourne**
Graduate Mentor *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`

Florida Institute of Technology **Melbourne**
Instructor *Fall 2012–Spring 2015*

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

Core Skills

Platforms: Linux, Unix, and Windows

Languages: C, C++, C#, FORTRAN, IDL, JavaScript, Julia, LaTeX, Perl, PHP, Python, SQL

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

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.