

# ANDREW C. HAWKINS

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## RESEARCH INTERESTS

Optimization and scientific computing with applications in machine learning and computer vision.

## EDUCATION

**Ph.D. Student, Department of Applied Mathematics and Statistics** August 2015 – (Expected) May 2019  
*Johns Hopkins University*, Baltimore, MD

**Bachelor of Science in Computational Mathematics** August 2010 – December 2013  
*Embry-Riddle Aeronautical University*, Daytona Beach, FL

## TEACHING EXPERIENCE

### Instructor

*Johns Hopkins University*, Baltimore, MD  
• EN.550.112: Statistical Analysis II Summer 2016  
*Daytona State College*, Daytona Beach, FL  
• MAT0028: Mathematics II Fall 2014

### Teaching Assistant

*Johns Hopkins University*, Baltimore, MD  
• EN.550.371: Cryptology and Coding Spring 2017  
• EN.550.439: Time Series Analysis Spring 2017  
• EN.550.171: Discrete Mathematics Fall 2016  
• EN.550.461: Optimization in Finance Fall 2016  
• EN.625.741: Game Theory Fall 2016  
• EN.550.453: Mathematical Game Theory Spring 2016  
• EN.550.361: Introduction to Optimization Fall 2015  
• EN.550.400: Mathematical Modeling and Consulting Fall 2015  
*Embry-Riddle Aeronautical University*, Daytona Beach, FL  
• MA 305: Introduction to Scientific Computing Fall 2013  
• MA 412: Probability and Statistics Fall 2012, Spring 2013

## PROFESSIONAL EXPERIENCE

**Data Scientist** January 2014 – July 2015  
*Product Quest Manufacturing*, Daytona Beach, FL

- Implemented statistical learning algorithms to predict the demand of finished goods.
- Navigated large data sets from a variety of sources and compiled them into a centralized database.
- Built front and back end software to distribute and automate future forecasting.
- Modeled and optimized operating procedures from component purchasing to product assembly.

## PUBLICATIONS

[1] Smith, T. A. and **Hawkins, A.** (2015). An economic regression model to predict market movements. *International Journal of Mathematics Trends and Technology*, 28(1), 1 – 3. doi:10.14445/22315373/IJMTT-V28P501

## LANGUAGES AND TECHNOLOGIES

**Proficient:** Python, MATLAB, Linux, Fortran, L<sup>A</sup>T<sub>E</sub>X, R

**Exposure:** Java, Haskell, Gnuplot, C

## AWARDS AND HONORS

- GAANN Fellow (2015 – 2016)
- McNair Scholar (2013)
- Shrinivas Dalal Memorial Scholarship in Mathematics, highest departmental award (2013)
- ERAU Achievement Scholarship (2010 – 2013)
- National Society of Collegiate Scholars (2011)
- Dean's List Standing (2010 – 2013)
- Eagle Scout in the Boy Scouts of America (2010)

## SELECTED TALKS

Hawkins, A. C. (2013). Exploring the Fisher Z-Transformation with applications in finance. *Undergraduate Mathematics Conference*. Embry-Riddle Aeronautical University, Daytona Beach, FL.

## SIDE PROJECTS

**AMS Department Student Seminar**, Baltimore, MD

September 2016 – present

*Organizer*

- Recruit students to give a talk about their current research, summer internships, class projects, etc.
- Coordinate plans and schedule a time and location for the presentation.
- Promote upcoming talks through various forms of media to bolster involvement.

**Hawkmatix**, Port Orange, FL

July 2012 – present

*Contributor*

- Publishes open source financial data analysis and trading software with documentation.
- Creates algorithmic trading strategies based on a variety of paradigms.