Daniel Taylor

Contact Information	dantaylor688@gmail.com http://dantaylor688.github.io

Research Interests	Applied mathematics
Education	**Eastern Michigan University** M.A. in Mathematics, April 2013 • Thesis Topic: *Optimal Stopping with Applications to Mathematical Finance* • Advisor: Ovidiu Calin B.S. in Mathematics, April 2011 B.S. in Physics, April 2011
Unpublished Reports	D. Taylor, *Optimal Stopping with Applications to Mathematical Finance,* Masters Thesis (December 2012). D. Taylor, *An Electric Circuit with a Stochastic Source,* Summer research project report, (July 2011). D. Taylor, *Momentum-Multiplicity Correlations in Relativistic Heavy Ion Collisions,* Summer Research Experience for Undergraduates Final Report, (August 2010).
Presentations	*Confidence Interval Estimation Using the Bootstrap Technique*, Graduate Research Fair, Eastern Michigan University. (March 2013) *Optimal Stopping and Free Boundary Problems with Applications to Mathematical Finance*, Colloquium, Eastern Michigan University. (December 2012) *The Effect of a Stochastic Source on the Equations Governing Current in an Electrical Circuit*, Colloquium, Eastern Michigan University. (April 2012) *Distinguishing Effects on Momentum Distributions in High Energy Nuclear Collisions*, Undergraduate Symposium, Eastern Michigan University. (March 2011) *High Altitude Ballooning: Physics from 20 Miles Up*, Undergraduate Symposium, Eastern Michigan University. (March 2011)

Teaching Experience

Fall	2014	Lecturer, Calculus I
Fall	2012	Lecturer, Intermediate Algebra
Winter	2012	Lecturer, Intermediate Algebra
Fall	2011	Lecturer, Intermediate Algebra

Honors and Awards

2010–2011 Robert Silver Award – Outstanding Scholarship in Modern Physics
Eastern Michigan University

2009–2010 Harry L. Smith Scholarship – Department of Physics
Eastern Michigan University

Graduate Coursework

- ❑ Real Analysis
- ❑ Linear Algebra
- ❑ Fourier Analysis
- ❑ Optimization Theory
- ❑ General Topology
- ❑ Categorical Data Analysis
- ❑ Stochastic Calculus

Undergraduate Physics Coursework

- ❑ Intermediate Mechanics
- ❑ Intermediate Electrodynamics
- ❑ Thermodynamics
- ❑ Optics

Scientific Research Experience

2016–Present Autonomous vehicle dynamics and mapping.
Manager: D. Clifford,
General Motors Inc.

2012–2014 Solving inverse problems related to atmospheric measurements using LIDAR.
Advisor: D. Johnson, Chief Scientist,
Michigan Aerospace Corporation.

2010 Summer Research Experience for Undergraduates.
Advisor: S. Gavin, Department of Physics,
Wayne State University.

Research References

David Johnson, Michigan Aerospace Corporation, (734)975-8777, `djohnson@michaero.com`

Matthew Lewis, Michigan Aerospace Corporation, (734)975-8777, `mlewis@michaero.com`

Ovidiu Calin, Eastern Michigan University, (734)487-1292, `ocalin@emich.edu`

Teaching Reference

Chris Gardiner, Eastern Michigan University, (734)487-1444, `cgardiner@emich.edu`