# Theodore S. Lindsey

### Education

- 2014–2016 MS, Computer Science, University of Kansas, Lawrence, KS, 3.63.
- 2011–2014 MA, Mathematics, University of Kansas, Lawrence, KS, 3.61.
- 2008–2011 BS, Mathematics, Principia College, Elsah, IL, 3.5.
- 2004–2008 A.A., Clackamas Community College, Oregon City, OR, 3.94.

# Computer tools

Languages Bash, C, C++, CSS, HTML, LATEX, Matlab, Python

Frameworks/Tools Git, Mathematica, RegEx, SQLite, TkInter

# Vocational Experience

### 2011-Present **Graduate Teaching Assistant**, *University of Kansas*.

Full teaching responsibility of the following courses:

- EECS 138: Introduction to Computing (C++), Fall 2015
- EECS 448: Software Engineering Lab, Spring 2015
- o Math 121: Calculus I Fall 2013, Spring 2014
- o Math 115: Business Calculus Spring 2013
- o Math 101: College Algebra Fall 2014, Fall 2012
- o Math 002: Elementary Algebra Fall 2011, Spring 2012

## 2011-Present Private Mathematics Tutor, Self-employed, Lawrence, KS.

Tutored one-on-one in subjects from algebra to differential equations. Managed marketing, scheduling, lesson plan design.

2010 - 2011 Mathematics Teaching Assistant, Principia College, Elsah, IL.

Tutored in both lab and classroom settings from remedial algebra through differential equations and statistics.

2009–2011 Student Manager, Tech Advisor, Principia College, Elsah, IL.

Managed observatory, arranged scheduling, improved observatory operation with assistance from faculty advisor, organized observatory club functions, advised faculty on purchases for observatory, served as liaison between faculty and student operators.

2008-2011 Observatory Operator, Principia College, Elsah, IL.

Staffed observatory, trained Junior Operators, led tours, recruited new operators.

2010 **Physics Department Intern**, *Principia College*, Elsah, IL.

Managed and cataloged lab supplies, assisted professors in lab preparation, created promotional materials including large format banners.

2007-2008 Mathematics tutor, Clackamas Community College, Oregon City, OR.

> Tutored community college students in a lab setting in subjects ranging from elementary algebra to calculus, linear algebra, and differential equations.

#### **Publications**

April 2014 T. Lindsey. On the Kalman Filter and Its Variations. M.A. thesis, ProQuest Dissertation Publishing.

February 2014 M. Bayeh, E. Compaan, T. Lindsey, N. Orlow, S. Melczer, S. Frazer, Z. Voller. *Ink-constrained halftoning with applications to QR codes.* IS&T/SPIE Electronic Imaging 2014.

### Presentations

- April 18, 2014 On the Kalman Filter and Its Variations. M.A. thesis defense, University of Kansas, Lawrence, Kansas.
- August 16, 2013 Ink-constrained halftoning with applications to QR codes. Mathematical Modeling in Industry XVII, Minneapolis, Minnesota.
  - April 2, 2011 Orthogonality Throughout Mathematics. MAA-MOMATYC contributed talk, Columbia College of Missouri, Columbia, Missouri.

# Workshops & Special Sessions

- 2014 Group leader in "Students + Workshops = Success + Fun" workshop series for elementary school students, in conjunction with Mathematics Awareness Month, Lawrence, KS, USA, April 10 and 16.
- 2013 Team member in the "Mathematical Modeling in Industry XVII," Visually significant QR-codes team (hosted by Institute for Mathematics and its Applications, University of Minnesota.
- 2013 Assistant for the special session on "The History of Workshops for High School Students and Teachers: The Ideas and Technology of Control Systems," held in conjunction with the American Conrol Conference, Washington, DC, USA, June 19.
- 2013 Assistant for the special session on "The History of Women in Control," held in conjunction with the 2013 American Control Conference, Washington, D.C., USA, June 18.
- 2013 Assistant for "The Beauty of Controls" workshop for middle and high school students and teachers, held in conjunction with the 2013 American Control Conference, Washington, D.C., USA, June 17.
- 2013 Co-coordinator of the "Students + Workshops = Success + Fun" workshop series for elementary school students, in conjunction with Mathematics Awareness Month, Lawrence, KS, USA, April 10 and 16.
- 2012 Presenter in the "Math, Statistics, and the Data Deluge" workshop for elementary school students, in conjunction with Mathematics Awareness Month, Lawrence, KS, USA, April 10 and 16.

### Conferences Attended

- 2014 American Control Conference, Portland, OR, USA, June 4 6
- 2013 American Control Conference, Washington, DC, USA, June 17 19
- 2012 AMS Central Section Meeting, Lawrence, Kansas, USA, March 30 April 1
- 2011 MAA-MOMATYC, Columbia, Missouri, USA, March 31 April 2

### Honors & Awards

- 2014 Finalist for the Florence Black Teaching Award (University of Kansas)
- 2013 National Science Foundation Graduate Research Assistant (DMS-1108884)
- 2013 Joan Kirkham Travel Scholarship (University of Kansas)

2011 Robert and Mary Keely Mathematics Award (Principia College)

2008 Eagle Scout, gold palm, American Legion Eagle Scout of the Year (Oregon)

2007 Phi Theta Kappa (2-year college honor society, Clackamas Community College)

# Community Service

2012-2014 Mathematics Awareness Month Volunteer, University of Kansas.

Organized and assisted with competitions and activities for K-12 students to raise math awareness.

2010-2011 President, Founding member, FreeGeek: Principia College, Elsah, IL.

Volunteer-run computer recycling and re-purposing group on campus. Rebuilt computers were given to needy and disadvantaged students.

2009 Classroom Assistant, Bagdad Elementary School, Bagdad, AZ.

Served in 1st grade classroom as general assistant and math tutor.

2007–2008 Eagle Scout Project, Beavercreek, OR.

Worked with local hamlet to raise funds, purchase, and install street signs to promote community identity.

Worked with the community to develop procedures and regulations governing street signs for hamlets.

2006–2008 FreeGeek: Portland, Portland, OR.

Rebuilt computers for computer recycling non-profit

## Personal Interests

Home automation Atmel AVR (Arduino)-based automation.

Prop manufacturing Mold-making, casting, fiberglass and resin, sculpture for costumes and props.

Multirotor UAS Building and programming RC quadcopters