

# Tyler Lemberg

810 B St.  
Lincoln, NE 68502  
Phone: 402-202-6857  
Email: [trlemburg@gmail.com](mailto:trlemburg@gmail.com)

## Current position

*M.S. student*, Meteorology/Climatology, University of Nebraska–Lincoln, Lincoln, NE  
- Focus in climate modeling

## Education

- 2015-2017 Visiting Student in Meteorology/Climatology, University of Nebraska–Lincoln, Lincoln, NE  
- 16 credits of 300-400 level meteorology classes
- 2006-2011 B.S. in Mathematics with Honors, University of Nebraska–Lincoln, Lincoln, NE  
- Thesis title: *Techniques in Integer Partitions*  
- Notable coursework: 2 years chemistry, 1 year honors physics
- 2002-2006 Chadron State College, Chadron, NE  
- 4 years college mathematics (distance learning) while in high school

## Research experience

- 2009-2011 UNL Undergraduate Creative Activities and Research Experience Grant, Lincoln, NE.  
- Research in integer partitions and modular forms under Dr. Jamie Radcliffe
- 2009 Summer Clemson University Mathematics REU, Clemson, SC.  
- Research in combinatorics under Dr. Neil Caplan, with Scott Atkinson, Jeff Beyerl, and Jeannette Brown
- 2007 Summer Trinity University Mathematics REU, San Antonio, TX.  
- Research in numerical monoids under Dr. Scott Chapman, with Nathan Kaplan, Andrew Niles, and Chrissy Zlogar

## Publications & talks

### JOURNAL ARTICLES

- 2014 S. Chapman, N. Kaplan, T. Lemberg, A. Niles, and C. Zlogar. Shifts of generators and delta sets of numerical monoids. *International Journal of Algebra and Computation*, Vol 24, No. 5 (2014)

## INVITED TALKS

- 2008 AMS-MAA Joint Math Meetings, 'Shifts of Generators and Delta Sets of Numerical Monoids', San Diego, CA
- 2007 Young Mathematician's Conference, Ohio State University, 'Numerical Monoids: Shifting Generators and Delta Sets', Columbus, OH

## Teaching experience

- 2007-2011 Undergraduate Teaching Assistant/Grader, University of Nebraska-Lincoln  
- Taught and graded Honors Calculus I, II, and III, and graded Introduction to Modern Algebra

## Honors & awards

- 2012-2013 University of Nebraska Young Alumni Academy
- 2010 ACM-ICPC Computer Programming Contest, Honorable Mention, World Finals
- 2009 ACM-ICPC Computer Programming Contest, 2nd Place, North Central Regionals
- 2009 ACM-ICPC Computer Programming Contest, Honorable Mention, World Finals
- 2008 ACM-ICPC Computer Programming Contest, 1st Place, North Central Regionals
- 2006 UNL Eastman Math Scholar
- 2006 National Merit Scholar
- 2005 UNL Math Day, 1st Place Class B Math Bowl, 4th Place individual
- 2005 American Legion Eagle Scout of the Year
- 2005 Eagle Scout

## Involvement

- 2013-2016 Bold Nebraska
- 2013-2016 350.org
- 2013 Climate Reality Leader
- 2009-2011 University of Nebraska Honors Program Student Advisory Board, Vice-President 2010
- 2009-2011 Lied Center Student Advisory Board
- 2007-2011 Pi Mu Epsilon (National Mathematics Honorary), President 2011

## Employment History

- 2015-current Senior Web Applications Engineer, University of Nebraska-Lincoln, Lincoln, NE  
- Manager and lead developer for several campus-wide services including UNL Events calendar, UNL Lockup Factory, UNL Resource Scheduler  
- Provide developer support for these and other applications  
- Contribute to UNL's award-winning web framework, encompassing all university websites into one look and feel
- 2014 Senior Web Developer, Archrival, Lincoln, NE  
- Built Adidas Playbook, a tool for Adidas field agents to schedule store visits, file reports, and collaborate

- Implemented and managed site search (via ElasticSearch and Lucene) on several site forums, blogs, and archives
  - Worked with designers to prototype and build responsive web experiences for clients
- 2013-2014 Senior Software Engineer, Firespring, Lincoln, NE
- Lead developer for PaymentSpring, a user-friendly payment processing gateway
  - Programmed core features including recurring billing system, PCI compliance, and online receipt management
  - Managed development priorities, testing practices, and quality assurance
  - Provided support for developers utilizing our API
- 2011-2013 Software Engineer, Firespring, Lincoln, NE
- Managed website for St. Baldrick's Foundation, a non-profit raising money for childhood cancer research
  - Developed Ruby API for mobile apps, managed PHP/Apache server architecture, and created responsive design for website raising over \$33 million per year
  - Improved donation processes and user experience to raise donations by over \$5 million each year
  - Integrated Facebook and Twitter to drive social media exposure
- 2011 Robot Designer, University of Nebraska-Lincoln, Lincoln, NE
- Worked with robotics professor Dr. Carrick Detweiler to help set up robotics course
  - Designed API for small hovercraft using Robot Operating System and C++
  - Programmed intelligence and control for hovercraft using X-Box 360 controller and onboard gyroscope
- 2010 Web Programmer, VMInnovations.com, Lincoln, NE
- Upgraded and maintained intranet website for fast-growing eBay company using Visual Basic.NET, JavaScript, and AJAX
  - Provided internal tech support and improved ChatNow, a tool allowing customer service to chat with users through company website
  - Managed and integrated Google AdWords for online sales, and implemented search engine optimization
- 2008 Programming Intern, Hudl, Lincoln, NE
- Created features for Hudl Pro, a video and playbook management software for college and professional football teams
  - Wrote code in Visual C#.NET and did quality assurance