

Matthew James Bolton

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Curriculum Vitae Updated 5/14/2017

EDUCATION

Bachelor of Arts, Psychology Expected May 2019
Minor in Multimedia Management
Saint Leo University, Saint Leo, FL
GPA: 3.87 (as of May 1, 2017)

Associate in Arts Graduated December 2015
Pasco-Hernando State College, Brooksville, FL GPA:
3.2

PROFESSIONAL WORK EXPERIENCE

How The Weatherworks August 2010-present
Florida Museum of Photographic Arts September 2014 - February 2015
Hernando County Office of Emergency Management February 2012 - June 2014
Foot's Forecast October 2010 - July 2013

PROFESSIONAL DEVELOPMENT

Southeastern Psychological Association (SEPA) Annual Meeting Future 2017
Horizons Autism Conference, Tampa, FL 2016
University of Oklahoma Weather Lab Radar Webinar 2016
Educational Services Center of Central Ohio Autism Internet Modules 2016
National Weather Service IDSS Webinar 2016
National Weather Association Annual Meetings 2011, 2013-2016
American Meteorological Society Warnings/Communication Conference 2015
American Meteorological Society Broadcasters' Conference 2015
American Meteorological Society Annual Meeting 2014
American Geophysical Union Fall Meeting 2013
FEMA Emergency Management Institute Courses (ICS-100, 200, 700) 2012
Howard University NCAS/CAREERS High School Weather Camp 2011
NC A&T NCAS High School Weather Camp 2010
Jackson State University NCAS High School Weather Camp 2009, 2010
National Weather Service Tampa Bay Job Shadow 2009, 2012
BayNews9 TV Station Job Shadow 2009
COMET Educational Weather Modules 2008

PROFESSIONAL AFFILIATIONS

<i>Psi Chi, International Honor Society for Psychology</i>	January 2017- present
<i>Southeastern Psychological Association (SEPA)</i>	October 2016-present
<i>Saint Leo University Psi Chi Local Chapter</i>	October 2016-present
<i>American Meteorological Society (AMS)</i>	2014
<i>National Weather Association (NWA)</i>	2011-present
<i>West Central Florida Chapter, AMS</i>	2008-present

AWARDS AND HONORS

<i>Psi Chi Regional Research Award (Southeast)</i>	March 2017
<i>First Place Oral Presentation, Undergraduate Research Program, SEPA</i>	March 2017
<i>Best NWA Annual Meeting Oral Presentation by an Undergraduate</i>	October 2015
<i>Dr. Dewey Stowers Merit Scholarship for Excellence in Meteorology</i>	April 2013
<i>Local Chapter of the Year, West Central Florida AMS (while serving as Recording Secretary)</i>	2012

RESEARCH INTERESTS AND EXPERIENCE

Autism Spectrum Conditions (ASC), Learning-Affecting Conditions and related Individual Differences, Cognition (memory, language development/impairment, decision-making, social cognition), Perception (of the self, visual, sensory) Empathizing-Systemizing Theory of ASC, Theory of Mind, Integrated Weather-Society Social Science, Interpersonal Social Dynamics, Color Vision Differences, Tropical Cyclones

MAJOR COLLABORATORS

Lara Ault, PhD	Saint Leo University
H. Michael Mogil, CCM, CBM, DMS	How The Weatherworks
Greg Blumberg	University of Oklahoma
Simon Baron-Cohen, PhD	University of Cambridge

<i>Research Intern (from high school), How The Weatherworks</i>	August 2010-present
<ul style="list-style-type: none">Leading project to determine trends in global tropical cyclone frequency.	
<i>Student Researcher, Saint Leo University</i>	December 2016-present
<ul style="list-style-type: none">Leading project to examine cognitive processes and mental health in physical scientists.	
<i>Student Researcher, Saint Leo University</i>	October 2016-present

- Leading project to examine autistic weather knowledge and perceptions.

Student Researcher, Saint Leo University

August 2016 - March 2017

- Conducted study to determine college student social perceptions of autistics.
Undergraduate thesis.

Student Researcher, Saint Leo University

May-September 2016

- Conducted case study examining the development of color-blind-friendly color tables for use in meteorological data displays.

Student, Pasco-Hernando State College

June-December 2015

- Lead project to advocate awareness of learning-affecting conditions among meteorologists.

TEACHING EXPERIENCE

Faculty Member / Co-Instructor, The Learningworks Foundation, Inc.

- Southwest Florida Middle School Weather Camp: 2013, 2014, 2016, anticipated summer 2017
- Southwest Florida High School Weather Camp: anticipated summer 2017

STUDENTS MENTORED

Garrett Harvey: middle/high school student;
2016 weather camp alumnus

May 2017-present

Jake Taylor: middle/high school student;
2014 weather camp alumnus

August 2014-present

Nico Sapienza: middle/high school student; 2014
weather camp alumnus

August 2014-present

William Opyrchal: high school student

2015

Grant Wise: high school / college student

2015

INVITED TALKS

*CEPO/Psi Chi Undergraduate Oral Presentation Session,
SEPA Annual Meeting*

March 2017

NWA Professional Development Mentoring Webinar

January 2017

South Tampa, FL YMCA Weather Program

June 2016

The Weather Junkies (weekly weather podcast)

May 2016

National Weather Service IDSS Webinar

January 2016

West Central FL AMS Chapter

November 2015

<i>Franklin Boys Preparatory School (Tampa, FL)</i>	November 2015
<i>University of Florida AMS Chapter</i>	April 2015
<i>Moderator for Book-signing Event / Author Q&A (Vanessa LaFaye, <i>Under A Dark Summer Sky</i>)</i>	March 2015
<i>Home Circle of Hernando Home School (Hernando County, FL)</i>	2012-2015
<i>Tomlin Middle School (Tampa, FL)</i>	September 2014
<i>WeatherBrains (weekly internet weather show)</i>	May 2014
<i>Cape Canaveral AMS Chapter</i>	February 2014
<i>American Geophysical Union Annual Meeting (for high school research)</i>	December 2013
<i>Barometer Bob Show (now-off-air weekly internet weather show)</i>	March 2011

CONFERENCE PRESENTATIONS

- Bolton, M. J.,** Baron-Cohen, S., & Ault, L. K. (2017, September). *An exploratory analysis of cognitive processing and mental health tendencies in physical scientists*. Accepted for poster presentation at the 42nd Annual Meeting of the National Weather Association, Garden Grove, CA.
- Bolton, M. J.,** Mogil, H. M., Blumberg, W. G., & Ault, L. K. (2017, September). *Exploring differences in weather knowledge and perceptions in autistic and non-autistic individuals*. Accepted for poster presentation at the 42nd Annual Meeting of the National Weather Association, Garden Grove, CA.
- Bolton, M. J.,** Blumberg, & Mogil, H. M. (2017, September). *An analysis of potential problems and solutions in weather communication with autistic individuals*. Accepted for poster presentation at the 42nd Annual Meeting of the National Weather Association, Garden Grove, CA.
- Bolton, M. J.,** Blumberg, & Mogil, H. M. (2017, July). *An analysis of potential problems and solutions in weather communication with autistic individuals*. Accepted talk to be presented at the American Meteorological Society's 4th Conference on Weather Warnings and Communication, Kansas City, MO.
- Bolton, M. J.,** & Ault, L. K. (2017, March). *The relationship between familiarity with ASD and disclosure of diagnosis*. Accepted poster which was then invited to be presented in oral format at the 63rd Annual Meeting of the Southeastern Psychological Association, Atlanta, GA. ***Awarded First Place in the CEPO/Psi Chi Undergraduate Research Program Oral Session, and winner of a Psi Chi Regional Research Award.***
- Bolton, M. J.,** Wise, G., & Blumberg, W. G. (2016, October). *Color blindness in the weather enterprise: Discussion and a look at solutions*. Accepted poster presented at the 41st Annual Meeting of the National Weather Association, Norfolk, VA. Abstract retrieved from http://nwas.org/meetings/nwas16/abstracts_html/Multifarious/2016_2806_oral_Bolton_abstract.html.

- Bolton, M. J.,** Wise, G., & Blumberg, W. G. (2016, June). *Color blindness in the weather enterprise: Discussion and a look at solutions*. Accepted talk presented at the 44th Conference on Broadcast Meteorology of the American Meteorological Society, Austin, TX. Abstract retrieved from <https://ams.confex.com/ams/44Broadcast/webprogram/Paper295309.html>.
- Bolton, M. J.,** & Mogil, H. M. (2016, April). *Tropical storms and hurricanes: Thinking inside the eye wall*. Accepted talk presented at the National Tropical Weather Conference, South Padre Island, TX.
- Bolton, M. J.,** & Blumberg, W. G. (2015, October). *Learning disorders in the meteorological community: Implications for communication and education*. Accepted talk presented at the 40th Annual Meeting of the National Weather Association, Oklahoma City, OK. Abstract retrieved from <http://nwas.org/meetings/nwas15/abstracts-html/2481.html>, *Awarded prize for Best Annual Meeting Oral Presentation by an Undergraduate*.
- Bolton, M. J.,** & Mogil, H. M. (2015, June). *A global analysis of tropical cyclone data/statistics*. Accepted talk presented at the 3rd Conference on Weather Warnings and Communication of the American Meteorological Society, Raleigh, NC. Abstract retrieved from <https://ams.confex.com/ams/43BC3WxWarn/webprogram/Paper273198.html>.
- Mogil, H. M., **Bolton, M. J.,** & Smith, T. E. (2014, October). *Potential links between global and regional tropical cyclone trends and "climate change"*. Accepted poster and talk presented at the 39th Annual Meeting of the National Weather Association, Salt Lake City, UT. Abstract retrieved from <http://www.nwas.org/meetings/abstracts/display.php?id=2209>.
- Mogil, H. M., Dewey, K. F., & **Bolton, M. J.** (2014, February). *Lots of ways to really LEARN about weather*. Accepted poster and talk presented at the 94th Annual Meeting of the American Meteorological Society, Atlanta, GA. Abstract retrieved from <https://ams.confex.com/ams/94Annual/webprogram/Paper236766.html>.
- Bolton, M. J.,** & Mogil, H. M. (2014, February). *An updated look at tropical cyclone data/statistics from a global perspective*. Accepted talk presented at the 94th Annual Meeting of the American Meteorological Society, Atlanta, GA. Abstract retrieved from <https://ams.confex.com/ams/94Annual/webprogram/Paper236774.html>.
- Bolton, M. J.** (2013, December). *Trends in tropical cyclone data; implications in the climate change debate*. Invited poster presented at the 46th Annual Fall Meeting of the American Geophysical Union, San Francisco, CA. Abstract retrieved from <http://abstractsearch.agu.org/meetings/2013/FM/ED41A-0695.html>. (*asked to present my previous high school research as part of the Bright Stars program*)

Mogil, H. M., Dewey, K. F., & **Bolton, M. J.** (2013, October). *Lots of ways to really LEARN about weather*. Accepted poster presented at the 38th Annual Meeting of the National Weather Association, Charleston, SC, Atlanta, GA.

Bolton, M. J., & Mogil, H. M. (2013, October). *An updated look at tropical cyclone numbers from a global perspective*. Accepted talk presented at the 38th Annual Meeting of the National Weather Association, Charleston, SC. Abstract retrieved from <http://nwas.org/meetings/abstracts/display.php?id=1844>.

Bolton, M. J., & Mogil, H. M. (2011, October). *Does global cyclone data support the "global warming" theory?* Accepted poster presented at the 36th Annual Meeting of the National Weather Association, Birmingham, AL. (*as a high school junior*)

PUBLICATIONS

Bolton, M. J., Baron-Cohen, S., & Ault, L. K. An exploratory analysis of cognitive processing and mental health tendencies in physical scientists. In preparation.

Bolton, M. J., & Ault, L. K. The relationship between familiarity with autism spectrum conditions, disclosure of diagnosis, and social responses to autistic individuals. Undergraduate thesis. In preparation.

Bolton, M. J. (2017). Social impairments in autism spectrum condition: A brief overview for meteorologists. *Monthly Newsletter of the National Weather Association*, 17(4), 7. (Editorially Reviewed) Retrieved from https://member.nwas.org/sites/default/files/nwa_pubs/NWA%20Newsletter_April%202017.pdf

Bolton, M. J., Blumberg, W. G., & Mogil, H. M. (2017). An analysis of the characteristics of autism spectrum conditions for application to weather communication methods in the weather enterprise. *Open Science Framework/PsyArXiv*. doi:10.17605/OSF.IO/TNA3X Retrieved from osf.io/52nqd

Bolton, M. J. (2016). Diversity University: April is autism awareness/acceptance month! *Monthly Newsletter of the National Weather Association*, 16(4), 7. (Editorially Reviewed) Retrieved from https://member.nwas.org/sites/default/files/nwa_pubs/April2016NWANewsletterSaturday.pdf

Roache, D., Collins, J. M., Mazza, C., & **Bolton, M.** (2012). Rainfall and severe weather influences in Pinellas County, Florida. *Bulletin of the American Meteorological Society* (Chapter Channel section), 93(5), 603-605. (Editorially Reviewed) (*Published as a high school senior*)

WEB - Guest Blog and Other Features

Bolton, M. J., Blumberg, W. G., & Mogil, H. M. (2017, May). An analysis of the characteristics of autism spectrum conditions for application to weather communication methods in the weather enterprise (abridged excerpt). Retrieved from <https://thewxsocial.com/2017/05/08/an-analysis-of-the-characteristics-of-autismspectrum-conditions-for-application-to-weather-communication-methods-in-the-weatherenterprise/>

Bolton, M. J. (2016, January 31). Learning disorders in the meteorological community: Implications for communication and education (abridged, guest post). Retrieved from <http://www.weatherworks.com/lifelong-learning-blog/?p=749>

Bolton, M. J. (2015, July 15). Everyone is a mentor: My thoughts on student mentoring (guest post). Retrieved from <http://www.weatherworks.com/lifelong-learning-blog/?p=745>

Bolton, M. J. (2015, April 13). A college student's perspective concerning the autism spectrum, part II (guest post). Retrieved from <http://www.weatherworks.com/lifelong-learningblog/?p=565>

Bolton, M. J. (2015, January 23). A college student's perspective concerning the autism spectrum (guest post). Retrieved from <http://www.weatherworks.com/lifelong-learningblog/?p=735>

QUOTED

Shepherd, M. (2016, August 14). The psychology of dealing with unprecedented events like the Louisiana floods. Retrieved from <http://www.forbes.com/sites/marshallshepherd/2016/08/14/the-psychology-of-dealing-with-unprecedented-events-like-the-louisiana-floods/#172669485269>

CODE DEVELOPED AND MANAGED

ColorBlindNARRreader

June 2015-present

Written in: Python

- Further developed a program originally written by Greg Blumberg (University of Oklahoma / Cooperative Institute for Mesoscale Meteorology Studies). This program reads data from the North American Regional Reanalysis (NARR) database to create basic meteorological data plots. Enhanced to be color-blind-accessible. This includes creating and configuring custom color maps which can be more easily interpreted by users with color vision deficiency. Open source; available via GitHub. <https://github.com/mbolton4211/ColorBlindNARRreader>

WEBSITES DESIGNED, DEVELOPED, AND MAINTAINED

*WAS*IS (Weather and Society Integrated Studies) Students*

October 2016-present

- Designed and maintain group website.
- wasistudents.weebly.com

Global Weather and Climate Center

March 2016-present

- Provide support for company website.
- www.globalweatherandclimatecenter.com

National Weather Association November 2015-present

- Maintain web pages for Professional Development and Diversity Committees □
www.nwas.org

MattBolton.me October 2014-present

- Personal portfolio website

How The Weatherworks 2013-present

- Facilitated two complete re-designs of, and provide support for, company website.
- www.weatherworks.com

Suncoast Stormwatch September 2008-present

- Personal, Florida-focused weather website
- www.suncoaststorwatch.com

Footsforecast.org 2012-2013

- Supported and maintained company website

PROFESSIONAL LEADERSHIP AND COMMUNITY SERVICE

*WAS*IS Students Website Committee* October 2016-present

National Weather Association Diversity Committee November 2015-present

National Weather Association Professional Development Committee November 2013-present

National Weather Camp Program 2013-present

- Head of Social Media Management
- Planning Committee Member
- Faculty Member & Camp Evaluator, Southwest FL

National Weather Service Certified Skywarn Storm Spotter 2008-present

West Central Florida AMS Chapter 2011-2013

- Education Committee Chair (2012-13)
- Social Media Committee Chair (2012-13)
- Recording Secretary (2011-12)

Weather Blogger for WTSP television station May 2011 – June 2012

Brooksville, FL Weather Observer for *St. Petersburg Times / Tampa Bay Times* and *Bay News 9* television station 2009

SPECIAL SKILLS

Proficiencies

- HTML, CSS, Wordpress CMS, Bootstrap coding framework
- Microsoft Office
- Adobe Lightroom
- IBM SPSS Statistical Software
- Social media management
- Qualtrics survey platform
- Meteorological data analysis (basic statistical analyses, mesoanalysis products, radar)
- Canon DSLRs and photography

Working Knowledge

- PHP, Javascript, Python
- Windows-based IT, information security, Linux (Ubuntu)
- QuickBooks Point-of-Sale System
- Excellent written communication skills