

# RYAN R. SPIES

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## Objective

To obtain a position with a progressive organization in a hydrology related field emphasizing the science and application of watershed management and modeling, utilizing my skills and experience implementing hydrologic instrumentation and software.

## Education: Iowa State University

### Candidate: Master of Science Geology

May 2013

- Proposed Thesis Title: Satellite-derived potential evapotranspiration for distributed hydrologic runoff modeling in Midwest watersheds

### Bachelor of Science Meteorology

2011

- Senior Thesis: August 2010 flood inundation mapping using GIS and LIDAR data along the Squaw Creek in Ames, IA
- Best Senior Thesis Award, 2010 – Iowa State University Atmospheric Sciences Program
- Dean's list: Fall 2007, Spring 2009, Fall 2009, Spring 2010, Spring 2011, Fall 2011
- Member of the National Society of Collegiate Scholars
- GPA: 3.75

## Experience

### Iowa State University

2011-2013

- Research Assistant: Designed project, acquired data, prescribed modifications, installed model, and performed statistical analysis. Presented research at the national AGU fall meeting in 2012 and 2013.
- Teaching Assistant: Taught 2 semesters of independent instruction of laboratory sections in upper level surface water hydrology class. Responsible for leading field work sections. Outstanding student evaluations in all areas.

### National Weather Service

2011

- Volunteer Internship: Hands on student training with current NWS employees learning the responsibilities of a full time weather/streamflow forecaster, recorded daily snowfall measurements, enhanced atmospheric/hydrologic forecasting skills, and refined communication and management skills while conducting past weather event simulator cases.

### WHO-Channel 13 Weather Department

Summer 2010

- Volunteer Internship: Generated state-wide weekly weather forecasts, composed television program graphics, polished communication skills, and assisted with live severe weather coverage.

## Skills and Affiliations

- Skilled in the following: data acquisition, data analysis, surface water and groundwater modeling, site assessment, and atmospheric/hydrologic forecasting.
- Computer Skills
  - Proficient experience with the following: Windows OS, Linux OS, Microsoft Office, Geographic Information System (GIS), Community Hydrologic Prediction System (CHPS), Hydrologic Engineering Center River Analysis System (HEC-RAS), Groundwater Vistas, MODFLOW, Hydrologic Laboratory Research Distributed Hydrologic Model, Sacramento Soil Moisture Model (SAC-SMA), SNOW-17.
  - Programming experience with Python, Fortran, Matlab, and HTML.
- Affiliations
  - American Geophysical Union
  - American Meteorological Society

## Leadership and Service

- ISU American Meteorological Society: local outreach events within the community promoting severe weather preparation
- Nevada Middle School: Volunteer after school academic tutor and basketball coach
- Cy's Eyes: Student-run local television network local weather program