
SUMMARY OF PROFESSIONAL EXPERIENCE

See subsequent pages for professional experience details

Teaching – Maintain 20 years of high-quality experience teaching at the college level, providing professional trainings, and implementing educational programs for universities, industry organizations, non-profit organizations, and government agencies

Service – Mentor ~50 Huntsman scholars, several university honors students, and graduate students in various disciplines; Serve as reviewer for higher education textbooks; Actively participate on numerous committees to manage curriculum, hire new employees, develop new courses, strategize recruitment efforts, and plan for new programs

Research – Developed, coordinated, and served as principal investigator for eight research projects over 13 years; Utilized various data analysis techniques to develop and implement management decisions

Presentations – Presented at 18 regional, national, and international conferences (6 invited) over ten years

Publications – Authored, co-authored, and edited 19 publications covering technical scientific articles published in competitive peer-reviewed journals, guidelines and manuals, book chapters, reports, and educational publications

Grants – Awarded \$1,021,578 in funding from government, private, and non-profit sources

SKILLS

Analytics – Analytical thinking to identify problems and develop solutions; Methods for describing sets of data; Descriptive analytics (cluster analysis, association analysis); Exploratory/inferential analytics (linear regression and multiple regression); Predictive analytics (model building, decision trees, logistic regression, and neural network analysis), And ability to effectively communicate results to stakeholders

Tools - R & R Studio, RapidMiner Studio, Power BI Desktop, SQL Server Management Studio, Excel Power Business Intelligence Add-Ins (PowerQuery, PowerView, PowerPivot, and PowerMap), OpenRefine, SAS, Access, SigmaPlot, ArcView, ArcEditor, ArcInfo, ArcGIS, DISTANCE, MARK, and PRESENCE

Communication – Effective interpersonal, oral, and written communication skills

Polly Conrad

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EDUCATION

Master of Science in Biology – Ecology | 2003 | Truman State University

Bachelor of Science in Biology | 2001 | Truman State University

EMPLOYMENT HISTORY

Lecturer , Utah State University (USU)	2014 – Current	Logan, UT
Consultant , Sigma-Aldrich & The Orianne Society	2012 – 2014	Logan, UT
Scientist/Analyst , State of Nevada	2003 – 2012	Las Vegas, NV
Research Assistant , Truman State University	1998 – 2003	Kirksville, MO

AFFILIATIONS & AWARDS

- **2018 Teacher of the Year Award**, Jon M. Huntsman School of Business & Management Information Systems Department
- Reviewer of MIS higher education textbooks, Pearson
- Huntsman Scholars Program, Faculty Mentor
- USU Business Intelligence Group (student club), Mentor
- USU Association of Information Systems (student club), Mentor
- Association of Business Communication, Member
- Western Governors' Association's Critical Habitat Assessment Tool Development Committee, State of Nevada Representative (selected based on ArcGIS capabilities)
- Partners in Amphibian and Reptile Conservation (PARC), National Chair
While Chair, PARC was awarded The Wildlife Society's 2013 **Group Achievement Award**, which globally recognizes an organization's outstanding wildlife achievement.
- Nominated for the Partners in Amphibian and Reptile Conservation's **Visionary Leader Award**, which globally recognizes an individual who exemplifies extraordinary leadership, vision, and commitment in a manner that has carried PARC to new heights
- Nominated for the Association of Fish and Wildlife Agencies' **Mark Reeff Memorial Award**, which nationally recognizes a distinguished young wildlife management professional for outstanding service in the conservation of fish and wildlife resources and for overcoming challenges through creative, determined initiatives of the nominee's own device

~ Detailed professional experience follows ~

TEACHING, TRAINING, AND EDUCATION

- Teach Big Data Analytics (MIS 3300) to undergraduate business majors at Utah State University (face-to-face, broadcast, and online sections, ~250-300 students each year). 2016 – Current.
- Big Data Analytics (MIS 3300) Course Coordinator. 2017 – Current. All MIS 3300 instructors meet each month during the academic year to coordinate course topics, tools, and teaching methods.
- Empowering Teaching Excellence Conference. 2017. Topics: Taking Pedagogical Risks, Online Student Engagement, Learning Analytics, and New Canvas Tools.
- Observed the following classes for a semester each: Dr. Bob Mills’ Database Implementation (MIS 3330, Fall 2017), Dr. Jeff Johnson’s Introduction to MIS (MIS 2100, Spring 2016), Dr. Kelly Fadel’s Big Data Analytics (MIS 3300, Fall 2015), and Prof. Marianna Larsen’s Business Communications (MIS 3200, Spring 2015).
- Huntsman School of Business Acumen Video Series. 2016. Recorded video for Big Data Analytics course: <https://www.youtube.com/watch?v=pzWtRb7FwRA>
- Data Analytics Conference. Partners in Business. Spring 2016.
- Developed online version of Big Data Analytics (MIS 3300) course. Fall 2016. Awarded \$5,000 by Distance Education.
- Empowering Teaching Excellence Conference. 2016. Topics: Concept Mapping, Using Analytics to See Patterns in Learning, and Exam Review Games.
- Developed blended (IVC-online) version of Big Data Analytics (MIS 3300) course. Summer 2016. Awarded \$5,000 by USU Provost Office.
- Obtained Quantitative Intensive Designation for Big Data Analytics (MIS 3300) course. 2016.
- Data Analytics Conference. Partners in Business. Spring 2015.
- Assisted with the development of the inaugural Big Data Analytics (MIS 3300) course. Fall 2015. The HSB implemented this new acumen course in analytics at a time when no materials existed for such a course. Development of this course required all new materials: finding textbooks, developing quiz and exam questions, finding business data sets, creating class material, and developing assignments and rubrics.
- Taught Business Communication (MIS 3200) classes to undergraduate business majors at Utah State University (12 sections, 205 students, over 4 semesters, face-to-face). 2014 – 2015.
- Empowering Teaching Excellence Conference. 2015. Topics: Flipping the Classroom, Engaging Students, Peer Tutoring, and Open Education Resources.
- E-Learning Excellence Workshop. 2015. Topics: Canvas Mapping, Modules, Quality Rubrics, Panopto Videos, Canvas Apps, Discussions, Analytics, and Library Resources.
- Flipping the Classroom Webinar. 2015. Topics: How to Flip a Classroom and How to Evaluate Students in a Flipped Environment.
- Association of Business Communication Conference. 2014. Topics: Resumes, Online Engagement, Plagiarism, Social Media, Preparing Millennials, Community Engagement, Intercultural Communication, Peer Feedback, and Academic Coaching.

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- Empowering Teaching Excellence Conference. 2014. Topics: Student Engagement Using Technology, Canvas Draft State, Organize Course Materials with Canvas, Library Services and Copyright, and Best Practices and Strategies.
- Teaching at USU: A Faculty Workshop. 2014. Topics: Canvas, IDEA Course Evaluations, Documenting Excellence in Teaching, Creating an Evidence-Based Portfolio, and Examples of Teaching Excellence from USU Faculty.
- Planned and implemented workshops and trainings given to professionals at national conferences, Developed educational materials for the public. State of Nevada. 2003 – 2014.
- Served as an undergraduate then graduate teaching assistant at Truman State University for college level courses and labs, professional workshops, and to provide educational opportunities within the local community. 1998 – 2003.

SERVICE & STUDENT MENTORING

- Mentor ~50 Huntsman Scholar students in the Jon M. Huntsman School of Business. 2018 – Current. The Huntsman Scholar Program is a highly selective undergraduate business and economics program offered to a select group of direct admit students into the Huntsman School.
- Management Information Systems Department Curriculum Committee. 2018 – Current.
- Utah State University Graduate Fair. 2018. Helped to recruit for the Master's in Management Information Systems program.
- Huntsman School of Business Career Fair. 2018. Facilitate relationships between students and potential employers.
- Mentor Business Intelligence (BI) Group Student Club. 2016 – Current. Mentor undergraduate and graduate students by providing data insights and analytics guidance during BI Group projects with local businesses.
- Mentor Association of Information Systems (AIS) Student Club. 2015 – Current. Mentor students by preparing finalist teams for national competitions.
- Mentor graduate students in the following programs: Master of Management Information Systems (including independent study), Master of Data Analytics, and Master of Business Administration
- Mentor Utah State University Honors students in management information systems and computer science.
- Mentor undergraduate students in the following programs: statistics, management information systems, finance, accounting, and statistics.
- Grade Prediction Application. 2017. Worked with a team of undergraduate students to develop a grade prediction tool to demonstrate data analytics in the business analytics course, MIS 3300. This team developed an SQL database, a multiple linear regression model (in Python), and developed the code to create the website for the tool (predictgrade-mis.usu.edu).

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- Management Information Systems Department Advisory Board Meetings. 2015 – Current. Attend meetings twice a year to present information about the acumen analytics course and to gain insight from industry representatives about what MIS skills our students need.
- Pearson Publishing, Reviewer of Management Information Systems higher education materials (textbooks and online learning platforms). 2017.
- Assisted the Nevada Department of Wildlife (Board of Wildlife Commissioners) to conduct data analysis and inform regulations about permitting commercial collection of reptiles. 2017.
- Huntsman School of Business Focused Friday. 2016. Moderated panel with analytics representatives from Intermountain Healthcare, Vivint Solar, the LDS Church, Pluralsight, and Jive. [<https://www.youtube.com/watch?v=lltHYtVzCMA>]
- Management Information Systems Department Meet the Firms. 2015-2017. Facilitate relationships between students and potential employers.
- Commencement Marshal. 2016. This served as a great opportunity to engage with students during graduation activities.
- Judged Student Analytics Competition. 2016. Partners in Business Data Analytics Conference.
- Assisted with oversight and implementation of master's in management information systems program during MMIS Advisor vacancy in 2015. This allowed me to interact with graduate students in the MMIS program.
- Mentored undergraduate marketing case team for national Wake Forest Marketing Analytics Summit Competition. 2015.
- Association of Business Communication. 2014. Member.

RESEARCH & ANALYTICS

- 2013 – 2014: **Association rules data mining model** used to detect trends in new and renewal memberships at The Orianne Society
- 2010 – 2013: Banded Gila monster (*Heloderma suspectum cinctum*) activity patterns and habitat use in Nevada; **cluster analysis** was used to identify areas of high activity
- 2011 – 2012: Avian predation of juvenile desert tortoises (*Gopherus agassizii*) along transmission line corridors in the Piute-Eldorado Critical Habitat Unit; **analysis of variance** used to compare predation rates in areas with and without transmission lines
- 2009 – 2011: Modeling habitat for Gila monster (*Heloderma suspectum*) over large landscapes; **occupancy model** developed to predict low- and high-probability areas for occurrence
- 2008 – 2012: Raven (*Corvus corax*) counts at major landfill sites in southern Nevada; **correlation** used to identify relationship between size of landfills and raven populations
- 2008 – 2010: Phylogenetic relationships of and habitat use by the pygmy short-horned lizard (*Phrynosoma douglasii*) and the greater short-horned lizard (*P. hernandesii*) in Nevada; **nested clade analysis** used to identify phylogeographic relationships,

Kendall's coefficient of rank correlation used to compare preexisting clades to the current study's clade, and **kernel analysis** used to identify habitat use

- 2006 – 2008: Distribution, habitat use, and activity patterns of the Sonoran mountain kingsnake (*Lampropeltis pyromelana*) in Nevada; **correlation matrix** used to identify relationships among various habitat characteristics and snake presence
- 2005 – 2012: Developed and implemented a statewide reptile monitoring program: Collected consistent, comprehensive, and objective scientific data on Nevada wildlife, analyzed population data, and developed and implemented management recommendations based on science; **analysis of variance** used primarily, although many analytic techniques were used during this time
- 2001 – 2003: Small mammal community responses to an oak-savanna restoration in northeast Missouri; **Morisita's community similarity indices and comparison of 95% confidence limit, Simpson's diversity indices and randomized t-test, and density estimates and Bartlett's test for homogeneity of variances** were used to compare populations between a restoration site and an adjacent unrestored site
- 1998 – 2001: Testing McGregor's hypothesis about the origin of *Echinacea pallida* (an allopolyploid derivative of *E. simulata* and a second diploid species, *E. sanguinea*); **nested clade analysis** used to identify phylogeographic relationships

PRESENTATIONS

- P. CONRAD. Teaching Tools and Strategies. 2018 Management Information Systems Department Faculty Research Presentation Series.
- K. Fadel, Z. Ugray, M. Quieroz, and P. CONRAD. Innovative Methods for Teaching Business Analytics. 2017 Huntsman School of Business Faculty Excellence Series in Logan, Utah.
- P. CONRAD and P. Nanjappa. Presentation of Partners in Amphibian and Reptile Conservation's Alison Haskell Award for Excellence in Herpetofauna Conservation. 2013 North American Wildlife and Natural Resources meeting in Crystal City, Virginia (invited); 2013 Southwest PARC meeting in Albuquerque, New Mexico.
- P. CONRAD. Partners in Amphibian and Reptile Conservation's 2013 Year of the Snake Campaign. 2012 Southwest PARC meeting in Las Vegas, Nevada; 2013 North American Wildlife and Natural Resources meeting in Crystal City, Virginia; 2013 Southwest PARC meeting in Albuquerque, New Mexico.
- CONRAD, P. and P. Nanjappa. Challenges and Findings in Regulating Herpetofauna in the U.S. 2011 Southwest PARC Meeting in Tucson, Arizona.
- CONRAD, P. and P. Nanjappa. State of the Union: Legal Authority Over the Use of Native Amphibians and Reptiles in the U.S. 2010 Association of Fish and Wildlife Agencies meeting in Grand Rapids, Michigan (invited); 2010 North American Wildlife and Natural Resources meeting in Milwaukee, Wisconsin (invited).

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- CONRAD, P. Climate Change and the Conservation of Native Amphibians and Reptiles: A Report from the USFWS Meeting. 2010 Southwest PARC meeting in Fort Collins, Colorado.
- CONRAD, P. and P. Nanjappa. Compilation of Herpetofauna Use Regulations in the U.S. 2009 Herpetofauna Regulatory Summit in Atlanta, Georgia.
- CONRAD, P. The Nevada Department of Wildlife Amphibian and Reptile Management Program. 2009 Southwest PARC meeting in St. George, Utah (invited).
- CONRAD, P. and C. Tomlinson. Nevada's Native Reptiles. 2009 Wings and Wildlife Festival of Southern Nevada in Laughlin, Nevada.
- CONRAD, P. and B. Bauman. Phylogeography of Pygmy Short-horned Lizard and Greater Short-horned Lizard in Nevada. 2009 Sheldon-Hart National Wildlife Refuge Symposium in Lakeview, Oregon; 2008 Southwest PARC meeting in Austin, Texas.
- Boykin, K. and P. CONRAD. Modeling Habitat for Gila Monster (*Heloderma suspectum*) Over Large Landscapes. 2009 Lake Mead Science Symposium in Las Vegas, Nevada; 2008 Southwest PARC meeting in Austin, Texas.
- CONRAD, P. and T. Geirmakowski. Herpetofauna Collection Regulations in the Southwestern U.S. 2008 Southwest PARC meeting in Austin, Texas.
- CONRAD, P. and C. Lee. Herpetofauna Conservation on Private Lands in Nevada. 2008 Southwest PARC meeting in Austin, Texas (invited).
- CONRAD, P. and B. Hamilton. Sonoran Mountain Kingsnake (*Lampropeltis pyromelana*) Surveys in the Snake Range, Nevada. 2008 Southwest PARC meeting in Austin, Texas.
- CONRAD, P. and J. Sjöberg. Nevada's Wildlife Action Plan: Herpetofaunal Conservation Goals. 2007 Southwest PARC meeting in Albuquerque, NM (invited).
- HIGGINS, P. and S. Burt. Small Mammal Community Responses to an Oak Savanna Restoration. 2003 American Society of Mammalogists meeting in Lubbock, Texas; 2003 Truman State University Symposium in Kirksville, Missouri; 2002 Missouri Academy of Science Meeting in Springfield, Missouri.
- Hooper, E. and P. HIGGINS. Testing McGregor's Hypothesis about the Origin of *Echinacea pallida*. 2000 Midwest Prairie Conference in St. Louis, Missouri.

PUBLICATIONS

2015	CONRAD, P. 2016. Desert Woodlands. In Jones, L.L.C., K.J. Halama, and R.E. Lovich, Ed. <i>Habitat Management Guidelines for Amphibians and Reptiles of the Southwestern U.S.</i> Partners in Amphibian and Reptile Conservation Technical Publication HMG-5, Birmingham, AL. 193 pp.
2014	Beaman, K., J. Jones, J. Lovich, C. Geinger, and P. CONRAD. 2014. <i>Heloderma suspectum cinctum</i> (Banded Gila Monster). <i>Herpetological Review</i> 45(3): 462. CONRAD, P., L. Wier, and P. Nanjappa, Eds. 2014. 2013 Annual Report. Partners in Amphibian and Reptile Conservation, Annual Report No. 4. Hagerstown, MD.
2013	CONRAD, P. and P. Nanjappa. 2013. Legally speaking, what can you do with amphibians and reptiles in the U.S.? <i>Year of the Snake News</i> 12:8.

CONRAD, P. 2013. The value of snakes: Snake venom can save your life. *Year of the Snake News* 3:1.

Breisch, A., P. CONRAD, P. Nanjappa, and T. Riley, Eds. 2013. 2012 Annual Report. Partners in Amphibian and Reptile Conservation, Annual Report No. 3 Hagerstown, MD.

2012 CONRAD, P. 2012. Using trail cameras to observe banded Gila monsters (*Heloderma suspectum cinctum*) in Nevada. *Year of the Lizard News* 3:5.

CONRAD, P. 2012. Southwest U.S. Inventory and Monitoring Techniques and Photo Vouchering Table In Graeter, G., K.A. Buhlman, L.R. Wilkinson, and J.W. Gibbons, Ed. *Inventory and Monitoring: Recommended Techniques for Reptiles and Amphibians with Applications to the United States and Canada*. Partners in Amphibian and Reptile Conservation Technical Report. Aiken, South Carolina.

2011 Nanjappa, P. and P. CONRAD. 2011. *State of the Union: Legal Authority Over the Use of Native Amphibians and Reptiles in the U.S.* Association of Fish and Wildlife Agencies. Washington, D.C.

2009 CONRAD, P. and P. Bradley. 2009. Geographic range extension for the western banded gecko (*Coleonyx variegatus*) in Nevada. *Herpetological Review* 40(1): 112.

CONRAD, P. 2009. Yellow-backed Spiny Lizard (*Sceloporus uniformis*). In Jones, L. and R. Lovich, Ed. *Lizards of the American Southwest*. Rio Nuevo Publishers. Tucson, Arizona.

CONRAD, P. 2009. Southwest Partners in Amphibian and Reptile Conservation Regional Working Group In Olson, D., E. Garcia, and P. Nanjappa, Ed. *Ten Years of Partners in Amphibian and Reptile Conservation*. Partners in Amphibian and Reptile Conservation, National Brochure No. 5. U.S. Department of the Interior, Bureau of Land Management. Denver, Colorado.

2008 Hamilton, B. and P. CONRAD. 2008. The Sonoran mountain kingsnake (*Lampropeltis pyromelana*) in the Great Basin. *International Reptile Conservation Foundation* 15(2): 86.

2007 CONRAD, P. and B. Hamilton. 2007. Focus on Conservation: Sonoran Mountain Kingsnake (*Lampropeltis pyromelana*). *International Reptile Conservation Foundation* 14(3): 106.

Hamilton, B. and P. CONRAD. 2007. Geographic range extension for the ground snake (*Sonora semiannulata*) in Nevada. *Herpetological Review* 38(1): 106.

Robinson, M.L., P. CONRAD, and M. Ryan. 2007. *Nevada's Venomous Reptiles*, 2nd Ed. Brochure SP-07-07. Nevada State Printing Office. Carson City, Nevada.

2005 CONRAD, P. 2005-2012. Reptiles In Wildlife Diversity Species Investigations. S.J. Atkinson, L.A. Neel, L. Richards, and C.R. Tomlinson, Ed. Job Performance Report for State Wildlife Grant. Nevada Department of Wildlife. Reno, Nevada.

2003 HIGGINS, P. 2003. Small Mammal Community Responses to an Oak Savanna Restoration. M.S. Thesis No. 1195. Truman State University.

GRANTS

\$5,000	Development of online version of course: Business data analytics (MIS 3300). Awarded by USU Distance Education fall 2016.
\$5,000	Development of blended version of course: Business data analytics (MIS 3300). Awarded by the USU Provost Office summer 2016.
\$19,354	The role of outdoor enclosures in advancing captive husbandry and reproduction in snakes sensitive to cyclic environmental conditions. Awarded by the Association of Zoos and Aquariums' Conservation Endowment Fund in 2013.
\$150,000	Longleaf Pine habitat restoration in southeast Georgia to benefit gopher tortoise (<i>Gopherus polyphemus</i>), eastern indigo snake (<i>Drymarchon couperi</i>), and eastern diamond-backed rattlesnake (<i>Crotalus adamanteus</i>). Awarded by the National Fish and Wildlife Foundation Longleaf Pine Stewardship Fund in 2013.
\$11,889	Development of a detailed sampling design plan for western rattlesnake (<i>Crotalus oreganus</i>) and tiger salamander (<i>Ambystoma tigrinum</i>) to lay a foundation for future genetic analyses to validate the Columbia Plateau connectivity analysis. Awarded by the Great Northern Landscape Conservation Cooperative in 2013.
\$44,618	Implementation and maintenance of land restoration and conservation practices in Telfair County, Georgia, to benefit gopher tortoise (<i>Gopherus polyphemus</i>). Awarded by the Natural Resources Conservation Service Wildlife Habitat Incentive Program's Working Lands for Wildlife Fund in 2013.
\$1,059	Identifying overwintering habitat requirements of eastern indigo snakes (<i>Drymarchon couperi</i>) and eastern diamondback rattlesnakes (<i>Crotalus adamanteus</i>) through long-term occupancy modeling. Awarded by Riverbanks Zoo and Garden Conservation Support Fund in 2013.
\$163,400	Development and refinement of Nevada's state wildlife critical habitat assessment tool and requisite datasets. Awarded by the Western Governors' Association in 2012.
\$99,000	Management of Mojave desert tortoise (<i>Gopherus agassizii</i>) and Gila monster (<i>Heloderma suspectum</i>) in Nevada. Awarded \$65,000 and \$34,000 by U.S. Fish & Wildlife Service Section Six funds in 2011 and 2010, respectively.
\$465,418	State wildlife action plan implementation resources and capacity building tools for amphibian and reptile conservation. A partnership of the Association of Fish & Wildlife Agencies and nine state wildlife agencies was awarded by Competitive State Wildlife Grant funds 2009 – 2011.
\$18,000	Recovery plan implementation for the Mojave population of the desert tortoise (<i>Gopherus agassizii</i>) in Nevada. Awarded by U.S. Fish & Wildlife Service Section Six funds in 2009.

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\$30,000	Phylogenetic relationships of short-horned lizards (<i>Phrynosoma hernandesi</i> and <i>P. douglassi</i>) in Nevada. Awarded by State Wildlife Grant funds 2007 – 2008.
\$4,000	Distribution of the Sonoran mountain kingsnake (<i>Lampropeltis pyromelana</i>) in Nevada. Awarded by State Wildlife Grant funds 2005 – 2006.
\$4,840	Small mammal community responses to an oak savanna restoration. Awarded by the Missouri Department of Conservation in 2001.
