

GREG CHISM

 [Gchism94](#) •  [gregtchism.com](#) •  gchism@arizona.edu

EDUCATION	University of Arizona, Graduate Interdisciplinary Program in Entomology and Insect Science Ph.D. Entomology and Insect Science, 2022 Dissertation: The Influence of Nest Architecture on the Ant <i>Temnothorax rugatulus</i> Advisor: Dr. Anna Dornhaus	
	University of California, Santa Barbara, Department of EEMB B.S. Zoology, 2016 Advisors: Drs. Armand Kuris, Kevin Lafferty, Jonathan Pruitt <ul style="list-style-type: none">• Graduated distinction within major	
ACADEMIC APPOINTMENTS	Assistant Professor of Practice University of Arizona - School of Information	July 2023 - Current
PROFESSIONAL APPOINTMENTS	Computational & Data Science Educator University of Arizona - Data Science Institute	Jan 2022 - July 2023
TEACHING	<i>University of Arizona</i> <ol style="list-style-type: none">1. INFO 526: Data Analysis and Visualization<ul style="list-style-type: none">• Also UArizona Global Campus instructor2. INFO 523: Data Mining and Discovery3. INFO 698: Capstone4. INFO 526: UArizona Global Campus <i>Fellowship Programs</i> <ol style="list-style-type: none">5. Data Science Fellows Program6. Roots for Resilience7. KEYS Research Internship Instructor8. PHIRE Research Training Initiative <i>Workshops</i> <ol style="list-style-type: none">9. Intro to Large Language Models10. Exploratory Data Analysis in R11. Reproducible Research with GitHub and RStudio12. Data Science Tapas13. Classical Machine Learning	<i>Spring 2024, Fall 2023</i> <i>Fall 2023 - Current</i> <i>Spring 2024, Fall 2023</i> <i>Fall 2023 - Current</i> <i>Fall 2023 - Current</i> <i>Summer 2023</i> <i>Summer 2022 - Spring 2023</i> <i>Summer 2022 - Summer 2023</i> <i>Spring 2023</i> <i>Summer 2023</i> <i>Summer 2022 - Spring 2023</i> <i>Spring 2023</i> <i>Spring 2023</i> <i>Spring 2023</i>
MENTORSHIP	<i>University of Arizona</i> <ol style="list-style-type: none">1. Data Science Capstone Mentor<ul style="list-style-type: none">• Mentored 3 Undergrad group capstones• Mentored 2 Grad capstones	Spring 2024 - Current

2. Undergraduate Research Mentor 2018 - 2022
 - Guided 9 students towards producing publication-quality data
 - Produced 2 student co-authors on academic manuscripts
3. KEYS / SARSEF High School Student Mentor 2018 - 2019
 - Mentored 4 Title I high school students in data etiquette and hypothesis testing

OUTREACH &
SERVICE

University of Arizona

1. Carpentries Instructor Trainer *Spring 2023 - Current*
 - Train new UArizona Carpentries Instructors
 - Hosted Carpentries Instructor teaching demos
2. UArizona DataLab Associate Member 2023 - Current
 - Promote and collaborate on just-in-time data science and AI workshops
3. Data Science Ambassador Coordinator 2023 - Current
 - Assist with coordinating the [UArizona Data Science Ambassadors](#) program
4. [ResBaz AZ 2023](#) *Spring 2023*
 - Chair of the steering committee
 - Expanded the festival to ASU and NAU
 - 100 attendees each day
5. Industry Careers in Data Science Speaker Series 2022 - 2023
 - Developed and hosted a speaker series that focused on academics that transitioned to industry careers in data science
 - 20-40 attendees/session from diverse disciplines, career stages, and cultures
6. RStudio Connect Landing Page 2022
 - Built a launch page and interactive user metrics dashboard with monthly project highlights
 - Final version was a HTML and Javascript landing site
7. [ResBaz AZ 2022](#) 2022
 - Co-chair of the steering committee
8. [Insect Discovery Website](#) 2022
 - Designed content for the Insect Discovery website hosted by the UArizona Extension Program
9. Entomology Graduate Student Association (EGSA) Social Chair 2019 - 2020
 - Organized social events to encourage comradery and growth.

PUBLICATIONS: (* indicates undergraduate students)

PEER-REVIEWED

1. Swetnam, T. L., Antin, P. B., Bartelme, R., Bucksch, A., Camhy, D., **Chism, G.**, ... and Lyons, E. (2024). CyVerse: Cyberinfrastructure for open science. *PLOS Computational Biology*, 20(2), e1011270. doi.org/10.1371/journal.pcbi.1011270
2. McEwen, B. L., Lichtenstein, J. L., Fisher, D. N., Wright, C. M., **Chism, G. T.**, Pinter-Wollman, N., and Pruitt, J. N. (2020). Predictors of colony extinction vary by habitat type in social spiders. *Behavioral ecology and sociobiology*, 74, 1-9. doi.org/10.1007/s00265-019-2781-x
3. Pruitt, J. N., Wright, C. M., Lichtenstein, J. L., **Chism, G. T.**, McEwen, B. L., Kamath, A., and Pinter-Wollman, N. (2018). Selection for collective aggressiveness favors social susceptibility in social spiders. *Current Biology*, 28(1), 100-105. doi.org/10.1016/j.cub.2017.11.011
4. Lichtenstein, J. L., **Chism, G. T.***, Kamath, A., and Pruitt, J. N. (2017). Intraindividual behavioral variability predicts foraging outcome in a beach-dwelling jumping spider. *Scientific Reports*, 7(1), 18063. doi.org/10.1038/s41598-017-18359-x
5. Foster, W. C.*, Armstrong, C. M.*, **Chism, G. T.***, and Pruitt, J. N. (2017). Smaller and bolder prey snails have higher survival in staged encounters with the sea star *Pisaster giganteus*. *Current Zoology*, 63(6), 633-638. doi.org/10.1093/cz/zow116

PUBLICATIONS: (* indicates undergraduate students)

BOOK CHAPTERS

6. Keiser, C. N., Lichtenstein, J. L., Wright, C. M., **Chism, G. T.***, Pruitt, J. N., Gonzalez-Santoyo, I., ... and Gonzalez-Tokman, D. (2018). Personality and behavioral syndromes in insects and spiders. *Insect behavior: From mechanisms to ecological and evolutionary consequences*, 236-256.

PUBLICATIONS: (* indicates undergraduate students)

PRE-PRINTS

7. **Chism, G. T.**, Nichols, W., and Dornhaus, A. (2023). Cavity geometry shapes overall ant colony organization through spatial limits but workers maintain fidelity zones. (Version 2) *bioRxiv*, 2023-10. doi.org/10.1101/2022.06.30.498314
 - In-Review at Animal Behaviour
8. **Chism, G. T.**, Faron, W.*, and Dornhaus, A. (2022). *Temnothorax rugatulus* ants do not change their nest walls in response to environmental humidity. *bioRxiv*, 2022-06. doi.org/10.1101/2022.06.30.497551
 - In-Revision
9. Davis, S. M., **Chism, G. T.**, Maurer, M. M., Trejo, J. E., Garcia, R. J., and Schlenke, T. A. (2021). A hymenopteran odorant alerts flies to bury eggs. *bioRxiv*, 2021-09. doi.org/10.1101/2021.09.30.462443
 - In-Review at Nature

PUBLICATIONS: **Software**

SOFTWARE,
DATA, &
COMPENDIA

10. Rice, L., Tate, S., Farynyk, D., Sun, J., **Chism, G.**, Charbonneau, D., ... and Shin, M. C. (2020). ABCTracker: an easy-to-use, cloud-based application for tracking multiple objects. *arXiv preprint arXiv:2001.10072*. doi.org/10.48550/arXiv.2001.10072

Data

(* indicates undergraduate students)

11. **Chism, G.**, Nichols, W.*, and Dornhaus, A. (2022). Nest shape influences colony organization in ants: spatial distribution and connectedness of colony members differs from that predicted by random movement and is affected by nest space (1.0.0) [Data set]. Zenodo. doi.org/10.5281/zenodo.6784395
12. **Chism, G.**, Faron, W.*, and Dornhaus, A. (2022). Temnothorax rugatulus ants do not change their nest walls in response to environmental humidity (1.0.0) [Data set]. Zenodo. doi.org/10.5281/zenodo.6780270

Compendia

(* indicates undergraduate students)

13. **Chism, G.**, Nichols, W.*, and Dornhaus, A. (2023). NestArchOrg (v3.0.0). Zenodo. doi.org/10.5281/zenodo.10059505
14. **Chism, G.**, Faron, W.*, and Dornhaus, A. (2022). Gchism94/HumidityProject: Research Compendium for DOI: <https://doi.org/10.1101/2022.06.30.497551> (1.0.0). Zenodo. doi.org/10.5281/zenodo.6981601
15. **Chism, G.** (2022). Gchism94/AntColonyPerformance: (Pre-release) Research Compendium for In preparation work (v0.1.0). Zenodo. doi.org/10.5281/zenodo.6872019

PUBLICATIONS: TEACHING MATERIALS

16. **Chism, G.** (2022). Data7-EDA-In-Python-Book: Data7 EDA in Python Learning Materials (v2.0.0). Zenodo. doi.org/10.5281/zenodo.7332354
17. **Chism, G.** (2022). Gchism94/Data7-rrtools-repro-research: Data7 Reproducible Research in GitHub and RStudio Workshop Series (v2.0.0). Zenodo. doi.org/10.5281/zenodo.7331798
18. **Chism, G.** (2022). Gchism94/Data7-EDA-In-R-Workshops: Data7 EDA in R Workshop Series (v1.0.0). Zenodo. doi.org/10.5281/zenodo.7331792
19. **Chism, G.** (2022). Gchism94/Data7-EDA-In-Shell: Data7 EDA in Unix Shell (v1.0.0). Zenodo. doi.org/10.5281/zenodo.7109121
20. **Chism, G.** (2022). Gchism94/Data7-EDA-In-SQL: Data7 EDA in SQL (v1.0.0). Zenodo. doi.org/10.5281/zenodo.7102943
21. **Chism, G.** (2022). Gchism94/DSI-KEYS2022-DataSci: Data7 KEYS 2022 Internship Data Science Materials (v2.0.0). Zenodo. doi.org/10.5281/zenodo.7023580

HONORS & AWARDS

EIS Carruth Award for Graduate Student Excellence (2021): \$500
GIDP - EIS Program Education Award (2020): \$250

FELLOWSHIPS

NSF Graduate Research Fellowship, Award Accepted (2019): \$150,000

CERTIFICATIONS

Carpentries Instructor Trainer (2023)
Carpentries Instructor (2022)

PROFESSIONAL ORGANIZATIONS	The Society of Integrative & Comparative Biology (SICB)	<i>2020-present</i>
	<ul style="list-style-type: none"> • Member of the Animal Behavior Division 	
	International Union for the Study of Social Insects (IUSI)	<i>2018-present</i>
	<ul style="list-style-type: none"> • Member of the North American Section 	
INVITED TALKS		
	<ol style="list-style-type: none"> 1. Chism, G. Integrating Data Science into your Research: An Introduction to the Data Science Institute. Computational Social Science Annual Gathering. University of Arizona. Tucson, AZ. November 2022. 2. Chism, G., Dornhaus, A. How nest shapes can influence colony level organization. Small intercontinental lab meet-up on colony organization and nest architecture in social insects. University of Arizona. Tucson, AZ. April 2021. 3. Chism, G., Dornhaus, A. Nest architecture may influence ants the same was buildings influence humans. Advances in Complex Systems: From Ecology to Economics - Lake Como School of Adv. Studies. Lake Como, Italy. July 2019. 4. Chism, G., Dornhaus, A. The influence of nest architecture on colony level organization in ants. UArizona SIAM Seminar series. University of Arizona. Tucson, AZ. April 2019. 	
UNIVERSITY & DEPARTMENTAL SERVICE	iSchool Awards Committee	<i>2023 - Current</i>
	<ul style="list-style-type: none"> • Served as a member, assisting in faculty award nomination and applications 	
PROFESSIONAL DEVELOPMENT	<p>Foundational Open Science Skills (FOSS). University of Arizona. Tucson, AZ. Fall 2022.</p> <ul style="list-style-type: none"> • Completed CyVerse’s workshop series on Foundational Open Science Skills, developing proficiency in open source cyberinfrastructure for reproducible research & scientific collaboration. <p>Designing the Data Science Classroom <code>rstudio::conf(2022)</code>. Washington, DC. July 2022.</p> <ul style="list-style-type: none"> • Completed a workshop on using R and RStudio for teaching in data science college classrooms. <p>Basic & Advanced Container Camp. University of Arizona. Tucson, AZ. Summer 2022.</p> <ul style="list-style-type: none"> • Completed CyVerse’s Basics and Advanced workshops on container technologies, emphasizing sharing, scaling, and reusing tools for computational analyses. <p>Data-driven Ecological Synthesis. Université de Montréal. Montréal, Canada. Spring 2018.</p> <ul style="list-style-type: none"> • Completed a week-long course focused on applying the R programming language to a diverse range of biological questions, enhancing expertise in data analysis and interpretation. 	