

AJ Long

Assistant Research Scientist
Engineering Education Manager for DRI Nevada Robotics
aj.long@dri.edu

Education

- 2007 M.A., Teaching Elementary Education, Sierra Nevada College, Incline Village, NV
Action Research: The Need for Teaching Study Skills at the Middle School Level
 - 2001 Teacher Education Program, Sierra Nevada College, Incline Village, NV
 - 1994 B.S., Human Development & Family Studies, Colorado State University, Ft. Collins, CO
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Professional and Academic Experience

- 2019 - Present Assistant Research Scientist (Rank II), Engineering Education Manager for Nevada Robotics, Desert Research Institute (DRI), Reno, NV
- 2012 - 2019 School Head, Lower & Middle School, Sage Ridge School, Reno, NV
- 2001 - 2019 Math and Science Faculty & Grade Level Team Leader, Sage Ridge School, Reno, NV
- 1999 - 2000 Science Faculty, Redwood Day School, Oakland, CA
- 1998 - 1999 Science Faculty, Squaw Valley Academy, Olympic Valley, CA
- 1997 - 1999 Outdoor Field Instructor, Colorado Outward Bound School, CO
- 1996 - 1998 Environmental Field Science Educator, Yosemite Institute, Yosemite National Park, CA

Awards and Recognition

- 2024 Silver State Brigade Cadet Colonel Club Induction
- 2023 Governor's Office of Science, Innovation, and Technology, Model STEM Program for DRI Nevada Robotics.
- 2023 Certificate of Special Congressional Recognition for Nevada Robotics, Jacky Rosen, US Senator
- 2017 Women of Achievement Award Winner, Nevada Women's Fund

Professional Activities and Affiliations

Governor's Office of Science, Innovation, and Technology, STEM Northwest Network, *Member*
Computer Science Teacher Advisory Board, selected position from the Nevada Department of Education
Portrait of a Learner *Partner*, selected position from the Nevada Department of Education
Nevada Robotics Coalition, *Founding Member*
The National Center for Women & Information Technology, *Nevada Advisory Board Member*
National Head Start Association, *Member*

Government and Industry Presentations

- 2024 Arrow Electronics Presentation on Nevada Robotics
 - 2023 Nevada Gold Mines Presentation on Nevada Robotics
 - 2023 Click Bond Community Outreach Team Presentation
 - 2023 NevadaWorks Presentation
 - 2023 Nevada Robotics Proposal Presentation for the Chief of Staff Governor Lombardo
 - 2021 Tesla Human Resources Robotics Training
 - 2021 EDAWN Lunch and Learn
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Service to the STEM Education and Academic Community

2024 - Present Aerial Drone Competition Judge and Program Support
2023 - Present Nevada Department of Education Portrait of Learner Partner
2022 - Present Skills USA Judge
2023 - 2024 NCWIT Judge
2022 - 2023 Congressional App Challenge Judge
2022 - 2023 Key Volunteer, VEX Robotics World Championship

Certifications

2023 VEX 123 Robotics Certification
2019 Nevada Teaching Credential, K - 8, Middle School Math Endorsement
2019 American Management Association, Project Management Skills
2000 Wilderness First Responder, Avalanche Course, Level II, Leave No Trace MasterTeacher
1995 High and Low Ropes Course Facilitator & Whitewater Rafting River Guide

Teaching and Advisement

Professional Development Led

Long, A.J., Strawder-Bubala, J.L., Kufeld, A.R. (2024, Feb. 28). White Pine County School District METRICS - Part I: An introduction to VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, David E. Norman, Ely, NV.

Long, A.J., Strawder-Bubala, J.L. (2024, Feb. 22). Washoe County School District METRICS - Part IV: Spelling with VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Lemelson STEM Academy, Reno, NV.

Long, A.J., Strawder-Bubala, J.L., Kufeld, A.R., Pemelton, S. (2024, Feb. 16). Books and Bots Training for Rural Nevada Educators PreK-5. [Workshop]. Spring Creek Elementary School, Spring Creek, NV.

Long, A.J., Strawder-Bubala, J.L., Kufeld, A.R., Pemelton, S. (2024, Feb. 15). Books and Bots Training for Rural Nevada Educators PreK-5. [Workshop]. Grammar #2 Elementary School, Elko, NV.

Long, A.J., Gallivan-Wallace, M. (2024, Feb. 1). Washoe County School District METRICS - Part III: Introducing the coder. [Training Session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Lemelson STEM Academy, Reno, NV.

Long, A.J., Parker, C.L., Kufeld, A.R., Pemelton, S. (2024, Jan. 26). Books and Bots training for informal settings and rural classrooms. [Workshop]. Winnemucca Boys and Girls Club, Winnemucca, NV.

Parker, C.L., **Long, A.J.**, Kufeld, A.R., Pemelton, S. (2024, Jan. 25). Books and Bots training for informal Winnemucca educators. [Workshop]. Grass Valley Elementary School, Winnemucca, NV.

- Parker, C.L., **Long, A.J.** (2024, Jan. 16). Washoe County School District METRICS - Part II: Sequencing begins with 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Lemelson STEM Academy, Reno, NV.
- Long, A.J.**, Strawder-Bubala, J.L. (2024, Jan. 8). Douglas County School District METRICS - Part III: Tying books to bots. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Minden Elementary School, Minden, NV.
- Long, A.J.**, Strawder-Bubala, J.L. (2023, Nov. 6). Douglas County School District METRICS - Part II: Incorporating VEX 123 into classroom centers. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Minden Elementary School, Minden, NV.
- Long, A.J.**, Strawder-Bubala, J.L. (2023, Sept. 18). Douglas County School District METRICS - Part I: An introduction to VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, C.C. Meneley Elementary School, NV.
- Long, A.J.**, Parker, C.L., Strawder-Bubala, J.L. (2023, Aug. 8). Introduction to METRICS [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Lemelson STEM Academy, Reno, NV.
- Gallivan-Wallace, M., **Long, A.J.**, Strawder-Bubala, J.L., Kufeld, A.R., Satmary, S. (2023 Jul. 24 - 28). STEM and Robotics Camp for the Girls on the Run Sierra Camp. [Program sessions]. Reno, High School, Reno, NV.
- Long, A.J.**, Parker, C.L., Strawder-Bubala, J.L. (2023, May 15). Introduction to METRICS [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2023-2024, Minden Elementary School, Minden, NV.
- Long, A.J.**, Parker, C.L. (2023, Apr. 18). Pleasant Valley METRICS - Part III: Math with VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Apr. 12). Mamie Towles METRICS - Part III: Math with VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Parker, C.L., **Long A.J.** (2023, Apr. 11). Pleasant Valley METRICS - Part II: ELA with VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Apr. 10). Pleasant Valley METRICS - Part IV: Frog fun with VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.

- Parker, C.L., **Long, A.J.** (2023, Apr. 5). Mamie Towles METRICS - Part II: Building with VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Apr. 4). Pleasant Valley METRICS - Part I: An introduction to VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Mar. 16). Mamie Towles METRICS - Part III: Math with VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Mar. 15). Mamie Towles METRICS - Part I: An introduction to VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Parker, C.L., **Long A.J.** (2023, Mar. 13). Pleasant Valley METRICS - Part III: Coding with VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Mar. 8). Mamie Towles METRICS - Part II: ELA with VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Parker, C.L., **Long A.J.** (2023, Mar. 6). Pleasant Valley METRICS - Part II: Geometry with VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Parker, C.L., **Long, A.J.** (2023, Mar. 2). Mamie Towles METRICS - Part I: An introduction to VEX 123. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Feb. 13). Pleasant Valley METRICS - Part I: An introduction to VEX GO. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Jan. 25). VEX GO applications and extension activities. [Training session]. Carson City Computer Science Teacher Professional Development Series, Carson City, NV.
- Long, A.J.**, Parker, C.L. (2023, Jan. 8). Introduction to METRICS. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Mamie Towles Elementary School, Reno, NV.
- Long, A.J.**, Parker, C.L. (2023, Jan. 11). An introduction to VEX GO as an engineering and computer science tool. [Training session]. Carson City Computer Science Teacher Professional Development Series, Carson City, NV.

- Long, A.J.**, Parker, C.L., Kufeld A.R. (2023, Jan. 10). VEX 123 - Part IV: Math integration. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Long, A.J.**, Parker, C.L. (2023, Jan, 9). Introduction to METRICS. [Training session]. Mentoring Educators Teaching Robotics and Innovation in Computer Science - Academic Year 2022-2023, Pleasant Valley Elementary School, Reno, NV.
- Kufeld A.R., **Long, A.J.**, Parker, C.L. (2022, Dec. 6). VEX 123 - Part III: Storytelling with robots. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Long, A.J.**, Parker, C.L. (2022, Dec. 6). VEX GO - Part III: Basic coding blocks. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Parker, C.L., Kufeld A.R., **Long, A.J.** (2022, Nov. 1). VEX 123 - Part II: From touch coding to block coding. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Parker, C.L., **Long, A.J.** (2022, Nov. 1). VEX GO - Part II: Building activities and engineering challenges. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Long, A.J.**, Parker, C.L., Kufeld, R. (2022, Oct. 19). VEX 123 - Part I: An introduction. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Parker, C.L., **Long, A.J.** (2022, Oct. 19). VEX GO - Part I: An introduction. [Training session]. Northeastern Nevada Computer Science Ambassador Professional Development Series. Virtual.
- Parker, C.L., **Long A.J.** (2022, Oct. 12). Advanced Finch robotics and unplugged coding. [Training session]. Carson City Computer Science Teacher Professional Development Series, Carson City, NV.
- Long A.J.**, Parker, C.L. (2022, Sept. 28). An introduction to Finch robots and unplugged computer science. [Training session]. Carson City Computer Science Teacher Professional Development Series, Carson City, NV.
- Long A.J.**, Parker, C.L. (2022, Sept. 15). VEX 123 Robotics Teacher Training for Elko County School District Media Science Specialists. [Workshop]. Great Basin College, Elko, NV.
- Long A.J.**, Parker, C.L. (2022, Apr. 21). An overview of VEX GO in the classroom: Carson City Computer Science Teacher Training. [Workshop]. Carson City, NV.
- Long A.J.**, Parker, C.L. (2022, Apr. 12). VEX GO Robotics, Educator Training for Northern Nevada Educators.[Workshop]. K-12 Robotics Center, Reno, NV.

Long A.J., Parker, C.L. (2022, Feb. 28). VEX GO Robotics, Educator Training for Northern Nevada Educators. [Workshop]. K-12 Robotics Center, Reno, NV.

Long A.J., Parker, C.L. (2021, Dec. 9). Hands-on Robotics Training for Tesla HR Employees. [Workshop]. K-12 Robotics Center, Reno, NV.

Collins, M., **Long A.J.** (2020, Jun. 15-19). Phenomena from the Field: Teacher Professional Development. [Conference Facilitator]. Virtual.

Long A.J., Peterson, M. (2019, Jun. 7-11). DRI Mars Camp, Grizzly Creek Ranch. [STEM Leader]. Sierra Nevada Journeys, Portola, CA.

Invited Speaker for Higher Education

Long, A.J., Strawder-Bubala, J.L. (2024, Feb. 20). Books and Bots for pre-service teachers - Part II. [Guest Lecturer]. Truckee Meadows Community College, Reno, NV.

Long, A.J., Strawder-Bubala, J.L. (2023, Dec. 5, 6, 7). Teaching tools of the future: Drones and robots for classroom use. [Guest Lecturer for 4 sections]. NVTeach at University of Nevada, Reno, Reno, NV.

Long, A.J., Strawder-Bubala, J.L. (2023, Sept. 26). Books and Bots for pre-service teachers - Part II. [Guest Lecturer]. Truckee Meadows Community College, Reno, NV.

Long, A.J., Strawder-Bubala, J.L. (2023, Sept. 19). Books and Bots for pre-service teachers - Part I. [Guest Lecturer]. Truckee Meadows Community College, Reno, NV.

Long A.J., Strawder-Bubala, J.L. (2023, Apr. 26). Classroom robotics for future teachers - Part II. [Guest Lecturer]. University of Nevada, Reno, Reno, NV.

Long A.J., Parker, C.L., Strawder-Bubala, J.L. (2023, Apr. 24). Classroom robotics for future teachers - Part I. [Guest Lecturer]. University of Nevada, Reno, Reno, NV.

Parker, C.L., **Long, A.J.** (2023, Feb. 21). Classroom robots and drones training for pre-service teachers - Part II. [Guest Lecturer]. Truckee Meadows Community College, Reno, NV.

Long A.J., Parker, C.L. (2023, Feb. 14). Classroom robots and drones training for pre-service teachers - Part I. [Guest Lecturer]. Truckee Meadows Community College, Reno, NV.

Parker, C.L., **Long A.J.** (2022, Sept. 28). Hands-on robotics training - Part II: VEX 123 & GO. [Guest Lecturer]. University of Nevada, Reno, Reno, NV.

Long A.J., Parker, C.L. (2022, Sept. 26). Hands-on robotics training - Part I: Ozobots & VEX 123. [Guest Lecturer]. University of Nevada, Reno, Reno, NV.

Parker, C.L., **Long A.J.** (2022, Mar. 18). An introduction to VEX GO for Great Basin College pre-service teachers. [Guest Lecturer]. Great Basin College, Virtual.

Long A.J., Parker, C.L. (2022, Feb. 16). Section 2: Hands-on robotics for pre-service teachers from UNR College of Education Students. [Guest Lecturer]. K-12 Robotics Center, Reno, NV.

Parker, C.L., **Long A.J.** (2022, Feb. 15) Hands-on robotics for pre-service teachers from TMCC. [Guest Lecturer] Truckee Meadows Community College, Reno, NV.

Long A.J., Parker, C.L. (2022, Feb. 14). Section 1: Hands-on robotics for pre-service teachers from UNR College of Education Students. [Guest Lecturer]. K-12 Robotics Center, Reno, NV.

Long A.J., Parker, C.L. (2021, Dec. 2). Hands-on Engineering Day for WNC Future Rural Educators. [Hands-on engineering and STEM workshop for high school students pursuing education] [Guest Lecturer]. Western Nevada College. Carson City, NV.

Funding

2024 Funding

Title: Nevada Robotics Books and Bots Teacher Trainings for Redfield Community Outreach Program

Sponsor: Nell J. Redfield Foundation

Principal Investigator: AJ Long

Co-PI: Claire Parker

Funding: \$75,000 (pending)

Duration: 07/01/24 - 06/30/27

Title: K-12 STEM skills development for preparing tomorrow's workforce for critical material and other industry needs in Nevada

Sponsor: U.S. Department of Education, Office of Elementary and Secondary Education

Principal Investigator: Dr. Naresh Kumar

Co-PI: AJ Long, Leah Madison, Emily McDonald-Williams, Claire Parker, Philippe Vidon

Funding: \$2,800,000 (pending)

Duration: FY2024

Title: PreK - 5 STEM Robotics for Pleasant Valley Elementary School

Sponsor: OSIT Sub Award

Principal Investigator: Claire Parker

Co-PI: AJ Long

Funding: \$5,000 (pending)

Duration: FY2024

Title: Innovation in Integrated Literacy: Robotics and English Language Arts Training for Educators

Sponsor: Nevada Department of Education, Early Childhood Innovation Literacy Program

Principal Investigator: Claire Parker

Co-PI: AJ Long

Funding: \$1,500,000 (pending)

Duration: 07/1/24 - 06/30/25

Title: Nevada Robotics METRICS Program Support for Washoe County Schools
Sponsor: Arrow Electronics
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$15,000 (pending)
Duration: 04/01/24 - 03/31/24

Title: Nevada Robotics Program Support
Sponsor: Click Bond Corporate Match
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$1,048.75 (pending)
Duration: 04/01/24 - 03/31/24

Title: Nevada Robotics Program Support
Sponsor: Click Bond Community Outreach Team
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$1,048.75
Duration: 04/01/24 - 03/31/24

Title: CY Energy Conservation: Books and Bots for Energy Saving Tips
Sponsor: NV Energy
Principal Investigator: Shawna Witt
Co-PI: AJ Long, Claire Parker
Funding: \$30,000
Duration: 01/01/24 - 12/31/24

2023 Funding

Title: Mentoring Educators Teaching Robotics & Innovation in Computer Science (METRICS) Minden & C.C. Meneley
Sponsor: Governor's Office of Science, Innovation, and Technology, Northwestern STEM Network Grant
Principal Investigator: Claire Parker
Co-PI: AJ Long
Funding: \$21,450
Duration: 09/01/23 - 06/30/24

Title: Books and Bots for Elko, Nevada
Sponsor: Governor's Office of Science, Innovation, and Technology, Northwestern STEM Network Grant
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$10,242
Duration: 09/01/23 - 06/30/24

Title: Mentoring Educators Teaching Robotics and Innovation in Computer Science (METRICS) for Washoe County Title I Schools
Sponsor: Economic Development of Western Nevada (EDAWN)
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$45,000
Duration: 08/02/23 - 12/29/24

Title: Linking NASA Engineering and Education to Advance Understanding
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: Claire Parker
Co-PI: AJ Long
Funding: \$24,999
Duration: 08/01/23 - 04/09/24

Title: Infrastructure for SPACE: Nevada's Youth Engineering the Future of NASA
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: Claire Parker
Co-PI: AJ Long
Funding: \$25,341 + \$10,226 additional state matching funds
Duration: 08/01/23 - 04/09/24

Title: Ozobot Robots for Teacher Training
Sponsor: Robert Z. Hawkins Foundation
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$23,920
Duration: 07/24/23 - 12/30/24

Title: Robotics and English Language Arts Training for Educators
Sponsor: Nevada Department of Education, Early Childhood Innovation Literacy Program
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$620,424
Duration: 12/01/23 - 06/30/24

Title: Rural and Statewide Nevada Robotics Support
Sponsor: Nevada Gold Mines
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$200,000
Duration: 07/01/23 - 06/30/24

Title: Mentoring Educators Teaching Robotics and Innovation in Computer Science (METRICS)
Pilot Program for Washoe County Schools
Sponsor: Washoe K-12 Education Foundation
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$24,000
Duration: 04/03/23 - 04/01/24

2022 Funding

Title: Robotics Outreach Coach Stupport (College Student Workers)
Sponsor: Nature's Bakery
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$15,000
Duration: 12/01/22 - 06/30/24

Title: Reaching Nevada's Rural and Tribal Schools and Communities Providing Robotics and Engineering Education Tomorrow's Future Workforce is in Today's Classroom
Sponsor: DRI Innovative Research Program
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$45,000
Duration: 09/01/22 - 08/31/23

Title: Inspiring the Next Generation of NASA Explorers through Aerial Drone Competition
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$24,998
Duration: 09/01/22 - 12/31/23

Title: Robot Ready: Engaging Northern Nevada Pre-Service Teachers with NASA Robotics
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$24,663
Duration: 08/01/22 - 05/31/23

Title: Robotics Teacher Training for Northern Nevada Schools
Sponsor: Economic Development of Western Nevada (EDAWN)
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$8,000
Duration: 06/06/22 - 06/06/23

Title: Ozobot Robots for Teacher Training
Sponsor: Robert Z. Hawkins Foundation
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$20,000
Duration: 03/18/22 - 03/18/23

Title: Robotics Academy of Nevada in Elko & Rural Robotics Coordinator
Sponsor: Nevada Gold Mines
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$150,000
Duration: 02/22/22 - 09/30/23

Title: Robotics Team Support for Northern Nevada Schools
Sponsor: Economic Development of Western Nevada (EDAWN)
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$5,000
Duration: 02/01/22 - 02/01/23

2021 Funding

Title: Robots for Sedway Middle School in Las Vegas
Sponsor: Caleb's Bar Mitzvah Project
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$1,000
Duration: 11/01/21 - 11/01/22

Title: Training for Tomorrow: Engaging Nevada's Rural Pre-Service Teachers with NASA Robotics
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: AJ Long
Funding: \$24,998
Duration: 07/01/21 - 05/31/22

Title: Tesla Teacher Externship
Sponsor: REC Foundation
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$52,301
Duration: 06/01/21 - 12/29/23

Title: Ph.D. Partners for CS-STEM Education
Sponsor: DRI Institute Project Assignment, Capacity Building
Principal Investigator: AJ Long
Funding: \$10,520
Duration: 05/31/21 - 05/31/22

Title: Robotics Team Support for Traner Middle School
Sponsor: TrainerRoad
Principal Investigator: AJ Long
Funding: \$5,000
Duration: 01/22/21 - 01/22/22

2020 Funding

Title: Nevada Robotics Program Support
Sponsor: Mary and Tom Gallagher Foundation
Principal Investigator: AJ Long
Funding: \$10,000
Duration: 12/18/20 - 12/18/21

Title: Nevada Robotics Program Support Day of Giving
Sponsor: Private Donations
Principal Investigator: AJ Long
Funding: \$1,000
Duration: 11/30/20 - 11/30/21

Title: STEM To Go Kits
Sponsor: DRI Institute Project Assignment
Principal Investigator: AJ Long
Co-PI: Claire Parker
Funding: \$30,000
Duration: 09/01/20 - 08/31/24

Title: Go Vex Go: An Elementary Pre-Service Robotics Teacher Training
Sponsor: Nevada NASA Space Grant Consortium
Principal Investigator: AJ Long
Funding: \$25,667
Duration: 07/01/20 - 04/09/21

Title: Virtual Educator Training
Sponsor: REC Foundation
Principal Investigator: AJ Long
Funding: \$2,354
Duration: 05/18/20 - 06/30/20

Title: Today's News in Science: Teachers Interview Scientists Online Professional Development Training
Sponsor: Governor's Office of Science, Innovation, and Technology, Northeastern STEM Network Grant
Principal Investigator: Craig Rosen
Co-PI: AJ Long, Leah Madison
Funding: \$8,132
Duration: 01/01/20 - 06/30/21

Title: Robotics STEM Kits

Sponsor: Governor's Office of Science, Innovation, and Technology, Rural STEM Network Grant

Principal Investigator: Craig Rosen

Co-PI: AJ Long, Leah Madison

Funding: \$8,415

Duration: 01/01/20 - 06/30/21

2019 Funding

Title: Robotics Academy of Nevada Teacher Training Support

Sponsor: Nevada Gold Mines

Principal Investigator: AJ Long

Funding: \$100,000

Duration: 12/01/19 - 02/28/22

Title: Nevada Robotics Program Support

Sponsor: Tesla K-12 STEM Education Investment

Principal Investigator: AJ Long

Co-PI: Claire Parker

Funding: \$2,587,703

Duration: 08/01/19 - 12/31/23

Conference Proceedings and Presentations

Conference Organization and Management

Long A.J., Parker, C.L., Gallivan-Wallace, M., Kufeld, A.R., Strawder-Bubala, J.L. (2023, Jun. 21 - 23). 4th Annual Robotics Academy of Nevada Educator Training. [Conference Chair]. Depoali Middle School, Reno, NV.

Long A.J., Gallivan-Wallace, M., Kufeld, A.R. (2023, Jun. 12 - 14). 2nd Annual Rural Robotics Academy of Nevada Educator Training. [Conference Chair]. Northside Elementary School, Elko, NV.

Long A.J., Parker, C.L., Kufeld, A.R. (2023, May 31 - Jun. 2). 4th Annual Robotics Academy of Nevada Educator Training. [Conference Chair]. Legacy High School, Las Vegas, NV

Long A.J., Parker, C.L. (2022, Jun. 17 - 18). 3rd Annual Robotics Academy of Nevada Educator Training. [Conference Chair]. Depoali Middle School, Reno, NV

Long A.J., Parker, C.L. (2022, Jun. 13 - 15). Inaugural Rural Robotics Academy of Nevada Educator Training. [Conference Chair]. Great Basin College, Elko, NV

Long A.J., Parker, C.L. (2022, Jun. 2 - 4). 3rd Annual Robotics Academy of Nevada Educator Training. [Conference Chair]. Lied Middle School, Las Vegas, NV

Brasher, S., **Long A.J.**, Parker, C.L. (2021, Oct. 22 - 23). VEX GO Virtual Pre-Service Teacher Training. [Conference Chair]. Virtual

Long A.J., Parker, C.L. (2021, Jun. 21 - 25). 2nd Annual Robotics Academy of Nevada Educator Training. [Conference Chair]. Las Vegas and Reno, NV

Gulling, A.J., **Long A.J.** (2021, Jun. 17 - 25). Inaugural Robotics Academy of Nevada Educator Training. [Logistics Support]. Reno, NV.

Brasher, S., **Long A.J.** (2020, Nov. 4 - 7). VEX GO Virtual Pre-Service Teacher Training. [Conference Chair]. Virtual.

Cruse, L., **Long A.J.** (2020, Jun. 23). VEX IQ Virtual Teacher Training for Title 1 Schools. [Conference Chair]. Virtual.

Cruse, L., **Long A.J.** (2020, Jun. 16). VEX IQ Virtual Teacher Training for Title 1 Schools. [Conference Chair]. Virtual.

Cruse, L., **Long A.J.** (2020, Dec. 13 - 14). VEX IQ Teacher Training. [Conference Chair]. Reno, NV.

Cruse, L., **Long A.J.** (2020, Nov. 8 - 9). VEX IQ Teacher Training. [Conference Chair]. Las Vegas, NV.

Cruse, L., **Long A.J.** (2020, Sept. 28) Robotics Academy of Nevada Robotics Refresher. [Conference Chair]. Reno, NV.

Cruse, L., **Long A.J.** (2020, Sept. 21). Robotics Academy of Nevada Robotics Refresher. [Conference Chair]. Las Vegas, NV.

Gulling, A.J., **Long A.J.** (2019, June 25). 1st Annual Robotics Academy of Nevada. [Logistics Support]. Reno, NV.

Oliver, D., **Long A.J.** (2019, Jun. 25-27). SEAD (Social Emotional Academy Development) Summit. [Conference Logistics]. Incline Village, NV.

Invited Presentations / Conferences

Long A.J., Parker, C.L., Strawder-Bubala, J.L., Kufeld, A.R., Pemelton, S. (2024, Aug. 15 - 16). Books and Bots: Developing STEM skills through literacy. [Conference presentation]. Nevada Association for the Education of Young Children Northeastern Regional Conference, Elko, NV.

Long A.J., Parker, C.L., Strawder-Bubala, J.L. (2024, Apr. 25 - 27). Books and Bots: Developing STEM skills through literacy. [Conference presentation]. Nevada Association for the Education of Young Children Northwestern Regional Conference, Sparks, NV.

Long A.J., Parker, C.L., Strawder-Bubala, J.L., Kufeld, A.R. (2024, Mar. 25 - 27). Books and Bots: How to use robots as a tool for teaching early math and literacy skills for PreK students. [Conference presentation]. Celebrate the Young Child Conference, Glendale, AZ.

Parker, C.L., **Long A.J.** (2023, Mar. 9 - 10). No Experience Needed! Developing Robot Ready Programming. [Conference presentation]. Nevada Afterschool Network Conference, Reno, NV.

Parker, C.L., **Long A.J.** (2022, Nov. 19). Hands-on STEM: Identifying the tools available [Conference presentation]. Nevada Teaching and Learning Conference, Virtual

Parker, C.L., **Long A.J.** (2022, Nov. 19). No Experience Needed! Developing Robot Ready Educators [Conference presentation]. Nevada Teaching and Learning Conference, Virtual

Long A.J., Peterson, M. (2020, Oct. 17). DRI Teacher Training and Resources. [Conference presentation]. Clark County New Teacher Symposium

Conferences Attended

2022 VEX Educators Conference, Dallas, TX
2021 The Future of Work in Nevada Conference, Virtual
2020 REC Foundation Event Partner Summit, Virtual
2019 Social Emotional Academic Development Summit, Incline Village, NV
2019 Digital TAT2 Workshops, Reno, NV
2016 Northwest Association of Independent Schools, School Heads Conference, WA
2013 Independent School Management, Middle School Heads Conference, CA
2007 Ophelia Project and Washoe County Conference on Girls and Bullying, UNR
2005 National Association of Math Teachers Conference, Reno, NV

Publications and Reports

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L., Satmary, S.M. Nevada Robotics Website. (2024, Feb. 1). Website development for the Nevada Robotics STEM Education program and resources. Available: <https://nevadarobotics.org/>

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2024, Jan. 17). Robotics Academy of Nevada 2024 Mid-Year Report for Nevada Gold Mines. Available from: <https://nevadarobotics.org/impact-reports/>

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Dec. 1). December Monthly Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Dec 1.). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 6. Available from: <https://nevadarobotics.org/robotics-reporter/>

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Nov. 1). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 5. Available from: <https://nevadarobotics.org/robotics-reporter/>

Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Nov. 1). Monthly EDawn Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>

- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Oct. 1). Monthly Rural Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Sept. 1). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 4. Available from: <https://nevadarobotics.org/robotics-reporter/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Sept. 1). Monthly Statewide Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Aug. 1). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 3. Available from: <https://nevadarobotics.org/robotics-reporter/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Aug. 1). Monthly Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Jun. 1). Monthly Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, May 1). Monthly Impact Update. Available from: <https://nevadarobotics.org/partner-email-updates/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Apr. 1). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 2. Available from: <https://nevadarobotics.org/robotics-reporter/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Feb. 1). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 1. Available from: <https://nevadarobotics.org/robotics-reporter/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023, Jan. 16). Robotics Academy of Nevada 2023 Impact Report. Available from: <https://nevadarobotics.org/impact-reports/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2023 Jan. 10). Robotics Academy of Nevada 2023 Impact Highlights. Available from: <https://nevadarobotics.org/impact-reports/>
- Long, A.J.**, Parker, C.L. (2022, Dec. 1). Nevada Robotics Impact Report. Available from: <https://nevadarobotics.org/impact-reports/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2021, Aug. 30). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 1. Available from: <https://nevadarobotics.org/robotics-reporter/>
- Strawder-Bubala, J.L., **Long, A.J.**, Parker, C.L. (2021, Aug. 15). Robotics Reporter: The Desert Research Institute's Nevada Robotics Newsletter. Vol. 1. Available from: <https://nevadarobotics.org/robotics-reporter/>

- Long, A.J.**, Parker, C.L., PBS Reno. Season 1, (2021, Aug. 1). STEM Works Digital Short Films: STEM Careers In Northern Nevada. Available from: <https://www.pbsreno.org/education/stemworks/>
- Long, A.J.**, Parker, C.L. (2021, Jul. 29). Robotics Academy of Nevada Report focusing on RAN, trainers, robots, diversity, and more. Available from: <https://nevadarobotics.org/impact-reports/>
- Long, A.J.** (2021, May 5). Nevada Robotics Pandemic Report March 2020 - May 2021. Available from: <https://nevadarobotics.org/impact-reports/>
- Long, A.J.** (2020 Jul. 20). Running the Numbers: Facts & Figures. A quick look at Nevada's statewide robotics growth and overall impact. Available from: <https://nevadarobotics.org/impact-reports/>
- Long, A.J.** (2020, Jul. 1). How Nevada Robotics Impacted Nevada in 2020. An impact report featuring teacher training impact, program goals and objectives, statewide robotics team data, data on educator reach, and overall impact. Available from: <https://nevadarobotics.org/impact-reports/>
- Long, A.J.** (2019, Sept. 10). Nevada Robotics Impact Report 2018-2019. Available from: <https://nevadarobotics.org/impact-reports/>