Contact Information	2155 E Wesley Ave Denver, CO, 80210, USA	(303) 871-3147 stephen.hutt@du.edu		
Education	University of Colorado, Boulder, Boulder, CO			
	Ph.D., Computer Science, August 2020			
	Thesis Topic: <i>Scaling Up: Moving Automated Gaze-Based Engagement Detection Out Of the Lab</i> Advisor: Sidney D'Mello, Ph.D			
	University of York, York, United Kingdom			
	M.Eng., First Class Honours Computer Science with Artificial Intelligence, July 2015			
	Thesis Topic: <i>Evolutionary Techniques for Developing Computer Poker Agents</i> Advisor: Dan Franks, Ph.D			
	University of California, Santa Cruz, Santa Cruz, CA			
	Exchange Year, Computer Science, 2012	2-2013		
Research Interests	Learning Analytics, Machine Learning, Affective Computing, Fair AI, Adaptive Learning Technologies, Learning Sciences, Human Computer Interaction			
RESEARCH EXPERIENCE	Assistant Professor Department of Computer Science University of Denver	September 2022 - Present		
	I lead a small research team investigating Human Centered AI, with a focus on educational applications and educational technologies. I work with a number of external collaborators, spanning the fields of Computer Science, Learning Sciences, Psychology, and Cognitive Science.			
	Assistant Director Penn Center for Learning Analytics University of Pennsylvania	August 2021 - August 2022		
	I held leadership role within the center, mentoring and supporting students while also maintaining my own research. I provide guidance and feedback to both PhD and Masters students affiliated with the Center. I also support the broader research goals of the center and center funding proposals. I worked closely with the devlopment team for the MOOC Replication Framework (MORF) - a data repository and analysis framework - and assist external researchers wishing to leverage MORF for their work.			
	<b>Postdoctoral Researcher</b> Graduate School of Education, University of Pennsylvania Supervisor: Ryan Baker, Ph.D	August 2020 - August 2022		
	Conducted research at the intersection of Computer Science knowledge and techn experiences that are both dynamic and be special focus on the fair treatment of stude groups.	Artificial Intelligence and Education. Used iques to create educational software and neficial for the learner. This research had a nts who are members of underrepresented		

#### PhD Researcher

Institute of Cognitive Science, University of Colorado, Boulder Supervisor: Sidney D'Mello, Ph.D

Explored how artificial intelligence and big data techniques can apply in education. Researched Fair AI in the context of educational software and worked with two large-scale datasets to explore how current methods commonly used in education contexts scale up. Designed and implemented real-time gaze-based Mind Wandering detection and interventions.

#### **PhD Researcher**

September 2015 to August 2017

Department of Computer Science, University of Notre Dame Supervisor: Sidney D'Mello, Ph.D

Designed and implemented a multimodal experiment on detecting affect and engagement during classroom learning. Collected eye gaze, video, and interaction data from students whilst they interacted with a Biology Intelligent Tutoring System. Built machine learning models of mind wandering using eye gaze data of students interacting with computers in multiple tasks.

#### **Masters Researcher**

September 2014 to July 2015

Department of Computer Science, University of York Supervisor: Dan Franks, Ph.D

Designed and implemented a framework to train agents to play Texas Hold'em poker. Using genetic algorithms and evolutionary computation approaches, I trained multiple agents playing against each other as well as expert and pre-trained agents.

JOURNAL ARTICLES

- J. Ocumpaugh, R. D. Roscoe, R. S. Baker, S. Hutt, and S. J. Aguilar, "Toward Asset-based Instruction and Assessment in Artificial Intelligence in Education," *International Journal of Artificial Intelligence in Education*, Jan. 2024, ISSN: 1560-4306. DOI: 10.1007/s40593-023-00382-x
- R. S. Baker, S. Hutt, N. Bosch, J. Ocumpaugh, G. Biswas, L. Paquette, J. M. A. Andres, N. Nasiar, and A. Munshi, "Detector-driven classroom interviewing: Focusing qualitative researcher time by selecting cases in situ," en, *Educational technology research and development*, Dec. 2023, ISSN: 1556-6501. DOI: 10. 1007/s11423-023-10324-y. (visited on 03/12/2024)
- 3. B. Lira, M. Gardner, A. Quirk, C. Stone, A. Rao, L. Ungar, **S. Hutt**, L. Hickman, S. K. D'Mello, and A. L. Duckworth, "Using artificial intelligence to assess personal qualities in college admissions," *Science Advances*, vol. 9, no. 41, eadg9405, 2023. DOI: 10.1126/sciadv.adg9405
- 4. **S. Hutt**, A. Wong, A. Papoutsaki, R. S. Baker, J. I. Gold, and C. Mills, "Webcam-based eye tracking to detect mind wandering and comprehension errors," *Behavior Research Methods*, Jan. 2023, ISSN: 1554-3528. DOI: 10. 3758/s13428-022-02040-x
- J. Zhang, J. M. A. L. Andres, S. Hutt, R. S. Baker, J. Ocumpaugh, N. Nasiar, C. Mills, J. Brooks, S. Sethuaman, and T. Young, "Using machine learning to detect SMART model cognitive operations in mathematical problem-solving process," *Journal of Educational Data Mining*, vol. 14, no. 3, pp. 76–108, Dec. 2022. DOI: 10.5281/zenodo.7304763

- 6. A. Munshi, G. Biswas, R. Baker, J. Ocumpaugh, **S. Hutt**, and L. Paquette, "Analysing adaptive scaffolds that help students develop self-regulated learning behaviours," *Journal of Computer Assisted Learning*, vol. n/a, no. n/a, DOI: https://doi.org/10.1111/jcal.12761
- 7. S. Hutt, R. S. Baker, M. M. Ashenafi, J. M. Andres-Bray, and C. Brooks, "Controlled outputs, full data: A privacy-protecting infrastructure for mooc data," *British Journal of Educational Technology*, vol. 53, no. 4, pp. 756–775, 2022. DOI: https://doi.org/10.1111/bjet.13231
- Y. Zhang, L. Paquette, N. Bosch, J. Ocumpaugh, G. Biswas, S. Hutt, and R. S. Baker, "The evolution of metacognitive strategy use in an open-ended learning environment: Do prior domain knowledge and motivation play a role?" *Contemporary Educational Psychology*, vol. 69, p. 102064, 2022, ISSN: 0361-476X. DOI: https://doi.org/10.1016/j.cedpsych.2022.102064
- 9. M. Gardener, **S. Hutt**, D. Kamentz, A. L. Duckworth, and S. K. D'Mello, "How does high school extracurricular participation predict bachelor's degree attainment? it's complicated," *Journal of Research on Adolesence*, 2020. DOI: 10.1111/jora. 12557
- S. Hutt, K. Krasich, C. Mills, N. Bosch, S. White, J. R. Brockmole, and S. K. D'Mello, "Automated gaze-based mind wandering detection during computerized learning in classrooms," *User Modeling and User-Adapted Interaction*, Jun. 2019, ISSN: 1573-1391. DOI: 10.1007/s11257-019-09228-5
- B. M. Galla, E. P. Shulman, B. Plummer, M. Gardner, S. Hutt, J. Goyer, A. Finn, S. D'Mello, and A. Duckworth, "Why high school grades are better predictors of on-time college graduation than are admissions test scores: The role of selfregulation and cognitive ability.," *American Educational Research Journal*, 2019. DOI: 10.3102/0002831219843292
- K. Krasich, R. McManus, S. Hutt, M. Faber, S. K. D'Mello, and J. R. Brockmole, "Gaze-based signatures of mind wandering during real-world scene processing," *Journal of Experimental Psychology: General*, vol. 147, no. 8, p. 1111, 2018. DOI: 10.1037/xge0000411

CONFERENCE PUBLICATIONS -STRICTLY PEER REVIEWED

- S. Hutt, A. DePiro, J. Wang, S. Rhodes, R. Baker, G. Hieb, S. Sethuraman, J. Ocumpaugh, and C. Mills, "Feedback on feedback: Comparing classic natural language processing and generative ai to evaluate peer feedback," in *Proceedings of the 14th International Conference on Learning Analytics and Knowledge (LAK24)*, In Press
- 14. A. F. Zambrano, A. Barany, J. Ocumpaugh, N. Nasiar, **S. Hutt**, A. Goslen, J. Rowe, J. Lester, E. Wiebe, and B. Mott, "Cracking the code of learning gains: Using ordered network analysis to understand the influence of prior knowledge," in *Proceedings of the 5th International Conference on Quantitative Ethnography*, In Press
- V. Kuvar, J. W. Y. Kam, S. Hutt, and C. Mills, "Detecting when the mind wanders off task in real-time: An overview and systematic review," in *Proceedings of the* 25th International Conference on Multimodal Interaction, ICMI '23, Paris, France: Association for Computing Machinery, 2023, pp. 163–173, ISBN: 9798400700552. DOI: 10.1145/3577190.3614126 (AR=10%)<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Acceptance Rates (AR) provided where available

- S. Hutt, S. Das, and R. S. Baker, "The right to be forgotten and educational data mining: Challenges and paths forward," in *Proceedings of the 16th International Conference on Educational Data Mining*, 2023 (AR=30%)
- J.-M. Andres-Bray, S. Hutt, and R. S. Baker, "Exploring cross-country prediction model generalizability in moocs," in *Proceedings of the Tenth ACM Conference on Learning@ Scale*, 2023, pp. 183–194 (AR = 28%) - Best Paper Award, Honourable Mention
- N. Nasiar, R. S. Baker, Y. Zou, J. Zhang, and S. Hutt, "Modeling problem-solving strategy invention (pssi) behavior in an online math environment," in *International Conference on Artificial Intelligence in Education*, Springer, 2023, pp. 453–459 (AR=21.1%)
- A. Goslen, N. Henderson, J. Rowe, J. Zhang, S. Hutt, J. Ocumpaugh, E. Wiebe, K. E. Boyer, B. Mott, and J. Lester, "Enhancing engagement modeling in game-based learning environments with student-agent discourse analysis," in *International Conference on Artificial Intelligence in Education*, Springer, 2023, pp. 681–687 (AR=21.1%)
- N. Nasiar, A. F. Zambrano, J. Ocumpaugh, S. Hutt, A. Goslen, J. Rowe, J. Lester, N. Henderson, E. Wiebe, K. Boyer, *et al.*, "It's good to explore: Investigating silver pathways and the role of frustration during game-based learning," in *International Conference on Artificial Intelligence in Education*, Springer, 2023, pp. 497–503 (AR=21.1%)
- 21. A. Y. Wong, R. L. Bryck, R. S. Baker, **S. Hutt**, and C. Mills, "Using a webcam based eye-tracker to understand students' thought patterns and reading behaviors in neurodivergent classrooms," in *LAK23: 13th International Learning Analytics and Knowledge Conference*, 2023, pp. 453–463 (AR=32%)
- 22. J. M. A. L. Andres, **S. Hutt**, J. L. Ocumpaugh, and R. S. Baker, "Investigating how achievement goals influence student behavior in computer based learning," in *Proceedings of the 30th International Conference on Computers in Education*, 2022 (AR=26.7%)
- S. Hutt and S. K. D'Mello, "Evaluating calibration-free webcam-based eye tracking for gaze-based user modeling," in *Proceedings of the 22nd ACM International Conference on Multimodal Interaction (ICMI 2022)*, New York, NY, USA: Association for Computing Machinery, 2022 (AR=15%)
- 24. M. He, R. S. Baker, **S. Hutt**, and J. Zhang, "A less overconservative method for reliability estimation for cohen's kappa," in *Proceedings of the 4th International Conference on Quantitative Ethnography*, In Press
- 25. R. S. Baker, **S. Hutt**, M. Mogessie, and H. Valayaputtar, "Research using the mooc replication framework and e-trials," in *2022 IEEE Learning With MOOCS* (*LWMOOCS*), 2022
- J. Zhang, J. M. A. L. Andres, S. Hutt, R. S. Baker, J. Ocumpaugh, C. Mills, J. Brooks, S. Sethuraman, and T. Young, "Detecting smart model cognitive operations in mathematical problem-solving process," in *Proceedings of the International Conference on Educational Data Mining*, 2022 (AR=28.9%) -Nominated for Best Paper Award
- 27. N. Levin, R. S. Baker, N. Nasiar, S. Fancsali, and **S. Hutt**, "Evaluating gaming detector model robustness over time," in *Proceedings of the International Conference on Educational Data Mining*, 2022 (AR=28.9%)

- J. Zhang, S. Hutt, J. Ocumpaugh, N. Henderson, A. Golsen, J. Rowe, K. Boyer, E. Wiebe, B. Mott, and J. Lester, "Investigating student interest and engagement in game-based learning environments," in *Proceedings of the International Conference on Artificial Intelligence and Education*, 2022 (AR=20%)
- 29. S. Hutt, A. E. Stewart, J. Gregg, S. Mattingly, and S. K. D'Mello, "Feasibility of longitudinal eye-gaze tracking in the workplace," *Proc. ACM Hum.-Comput. Interact.*, vol. 6, no. ETRA, May 2022. DOI: 10.1145/3530889. [Online]. Available: https://doi.org/10.1145/3530889 (AR=38%)
- J. M. A. L. Andres, S. Hutt, J. L. Ocumpaugh, R. S. Baker, N. Naisar, and C. Porter, "How anxiety affects affect: A quantitative ethnographic investigation using affect detectors and data-targeted interviews," in *Proceedings of the 3rd International Conference on Quantitative Ethnography*, 2021 (AR=56.5%)
- J. L. Ocumpaugh, S. Hutt, J. M. A. L. Andres, R. S. Baker, G. Biswas, N. Bosch,
  L. Paquette, and A. Munshi, "Using qualitative data from targeted interviews to inform rapid aied development," in *Proceedings of the 29th International Conference on Computers in Education*, 2021 (AR=25.9%)
- 32. S. Hutt, J. Ocumpaugh, J. M. A. L. Andres, A. Munshi, N. Bosch, R. S. Baker, Y. Zhang, L. Paquette, S. Slater, and G. Biswas, "Who's stopping you? - using microanalysis to explore the impact of science anxiety on self-regulated learning operations," in *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*, 2021 (AR=32.4%)
- 33. **S. Hutt**, J. Ocumpaugh, J. M. A. L. Andres, N. Bosch, L. Paquette, G. Biswas, and R. S. Baker, "Sharpest tool in the shed: Investigating smart models of self-regulation and their impact on learning," in *Proceedings of the International Conference on Educational Data Mining*, 2021 (AR=22%)
- Y. Zhou, J. Andres-Bray, S. Hutt, K. Ostrow, and R. S. Baker, "A comparison of hints vs. scaffolding in a mooc with adult learners," in *Proceedings of the International Conference on Artificial Intelligence and Education.*, 2021, pp. 427–432 (Short Paper)
- 35. R. S. Baker, B. McLaren, **S. Hutt**, J. Richey, E. Rowe, M. Almeda, M. Mogessie, and J. M. A. L. Andres, "Towards sharing student models across learning systems," in *Proceedings of the International Conference on Artificial Intelligence and Education.*, 2021, pp. 60–65 (Short Paper)
- R. S. Baker, N. Nasiar, J. L. Ocumpaugh, S. Hutt, J. M. A. L. Andres, S. Slater, M. Schofield, A. Moore, L. Paquette, A. Munshi, and G. Biswas, "Affect-targeted interviews for understanding student frustration," in *Proceedings of the International Conference on Artificial Intelligence and Education.*, 2021, pp. 52–63 (AR=23.8%) Best Paper Award
- S. Hutt, K. Krasich, J. R. Brockmole, and S. K. D'Mello, "Breaking out of the lab: Mitigating mind wandering with gaze-based attention-aware technology in classrooms," CHI '21, Yokohama, Japan: Association for Computing Machinery, 2021, ISBN: 9781450380966. DOI: 10.1145/3411764.3445269 (AR=26%)
- E. Jensen, T. Umada, N. C. Hunkins, S. Hutt, A. C. Huggins-Manley, and S. K. D'Mello, "What you do predicts how you do: Prospectively modeling student quiz performance using activity features in an online learning environment," in *LAK21: 11th International Learning Analytics and Knowledge Conference*, LAK21, Irvine, CA, USA: Association for Computing Machinery, 2021, pp. 121–131, ISBN: 9781450389358. DOI: 10.1145/3448139.3448151 (AR=32%)

- S. Hutt, M. Gardner, A. L. Duckworth, and S. K. D'Mello, "Evaluating fairness and generalizability in models predicting on-time graduation from college applications," in *Proceedings of the International Conference on Educational Data Mining*, C. F. Lynch, A. Merceron, M. Desmarais, and R. Nkambou, Eds., 2019, pp. 79–88 (AR=22.5%)
- E. Jensen, S. Hutt, and S. K. D'Mello, "Generalizability of sensor-free affect detection models in a longitudinal dataset of tens of thousands of students," in *Proceedings of the International Conference on Educational Data Mining*, C. F. Lynch, A. Merceron, M. Desmarais, and R. Nkambou, Eds., 2019, pp. 324–329 (Short Paper)
- 41. S. Hutt, J. F. Grafsgaard, and S. K. D'Mello, "Time to scale: Generalizable affect detection for tens of thousands of students across an entire school year," in *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*, CHI '19, Glasgow, Scotland UK: ACM, 2019, 496:1–496:14, ISBN: 978-1-4503-5970-2. DOI: 10.1145/3290605.3300726 (AR=24%)
- C. Stone, A. Quirk, M. Gardener, S. Hutt, A. L. Duckworth, and S. K. D'Mello, "Language as thought: Using natural language processing to model noncognitive traits that predict college success," in *Proceedings of the 9th International Conference on Learning Analytics & Knowledge*, LAK19, Tempe, AZ, USA: ACM, 2019, pp. 320–329, ISBN: 978-1-4503-6256-6. DOI: 10.1145/3303772. 3303801 (AR=32%)
- K. Krasich, S. Hutt, C. Mills, C. A. Spann, J. R. Brockmole, and S. K. D'Mello, "MindTS: Testing a brief mindfulness intervention with an intelligent tutoring system," in *Proceedings of the 19th International Conference on Artificial Intelligence in Education (AIED'18)*, London, UK, Jun. 2018 (AR=22.5%)
- 44. S. Hutt, M. Gardener, D. Kamentz, A. L. Duckworth, and S. K. D'Mello, "Prospectively predicting 4-year college graduation from student applications," in *Proceedings of the 8th International Conference on Learning Analytics and Knowledge*, LAK '18, Sydney, New South Wales, Australia: ACM, 2018, pp. 280–289, ISBN: 978-1-4503-6400-3. DOI: 10.1145/3170358.3170395 (AR=30%)
- 45. J. DeBenedetto, **S. Hutt**, L. Faust, A. Liu, and N. Kremer-Herman, "Placating plato with plates of pasta: An interactive tool for teaching the dining philosophers problem," in *2017 IEEE Frontiers in Education Conference (FIE)*, Oct. 2017, pp. 1–9. DOI: 10.1109/FIE.2017.8190443
- 46. S. Hutt, C. Mills, N. Bosch, K. Krasich, J. Brockmole, and S. D'Mello, "Out of the fr-eye-ing pan: Towards gaze-based models of attention during learning with technology in the classroom," in *Proceedings of the 25th Conference on User Modeling, Adaptation and Personalization*, UMAP '17, Bratislava, Slovakia: ACM, 2017, pp. 94–103, ISBN: 978-1-4503-4635-1. DOI: 10.1145/3079628. 3079669 (AR=36.2%) Best Student Paper Award
- 47. **S. Hutt**, J. Hardey, R. Bixler, A. Stewart, E. Risko, and S. K. D'Mello, "Gazebased detection of mind wandering during lecture viewing," in *Proceedings of the 10th International Conference on Educational Data Mining. International Educational Data Mining Society.*, 2017 (AR=42%)
- 48. S. Hutt, C. Mills, S. White, P. J. Donnelly, and S. K. D'Mello, "The Eyes Have It: Gaze-based Detection of Mind Wandering during Learning with an Intelligent Tutoring System.," in *Proceedings of the 9th International Conference* on Educational Data Mining. International Educational Data Mining Society., T.

Barnes, M. Chi, and M. Feng, Eds., 2016, pp. 86–93 (Exemplary Full Paper AR=15%)

#### BOOK CHAPTERS

- 49. S. Hutt, R. S. Baker, J. Ocumpaugh, A. Munshi, J. M. A. L. Andres, S. Karumbaiah, S. Slater, G. Biswas, L. Paquette, N. Bosch, and M. van Velsen, "Quick red fox: An app supporting a new paradigm in qualitative research on aied for stem," in *Artificial Intelligence in STEM Education:The Paradigmatic Shifts in Research, Education and Technology*, CRC Pres, 2022, ISBN: 9781003181187
- WORKSHOP
  PAPERS
  50. S. Hutt, S. Karumbaiah, and J. L. Ocumpaugh, "Optimizing philosophies for predictive models in learning analytics," in *LAK21: 11th International Learning Analytics and Knowledge Conference - Companion Proceedings*, LAK21, 2021, pp. 325–326
- WORKSHOPS51. A. Stewart, L. Lawrence, N. Lobczowski, and S. Hutt, "Knowing your abcs: Asset<br/>based communication for actionable learning interventions," in *The 20th Biennial*<br/>*EARLI Conference*, 2023

SELECTED CONFERENCE PRESENTATIONS

- 52. **S. Hutt** and G. Hieb, *Generating mastery: Developing a closed loop system to support mastery learning*, Society for Computation in Psychology, Nov. 2023
- 53. **S. Hutt**, J. L. Ocumpaugh, and N. Naisar, *How do you feel and why?: Integrating affective and motivational research with a 2-stage self-reporting tool*, Society for Computation in Psychology, Nov. 2023
- 54. **S. Hutt**, R. S. Baker, M. Mogessie, and H. Valayaputtar, *Tools for mooc data analysis and experimentation at the university of pennsylvania*, International Conference on Artificial Intelligence and Education, Durham, UK, Jul. 2022
- 55. J. R. Brockmole, K. Krasich, **S. Hutt**, and S. K. D'Mello, *Attention-aware cyberlearning to detect and combat wandering minds*. 59th Annual Meeting of the Psychonomic Society., New Orleans, LA, USA, Nov. 2018
- 56. A. Quirk, **S. Hutt**, M. Gardner, A. Duckworth, and S. K. D'Mello, *Analyzing* open-ended descriptions of extracurricular participation for evidence of character development, Promoting Character Development Among Diverse Children and Adolescents: The Roles of Families, Schools, and Out-Of-School-Time Youth Development Programs, Philadelphia, PA, USA., Oct. 2018
- 57. B. M. Galla, R. N. Baelen, H. Fiore, **S. Hutt**, and A. Shenhav, *Compared to self-immersion, mindfulness reduces social media desires and boosts academic self-control in undergraduates*, International Symposium for Contemplative Research (ISCR), Arizona, USA, Nov. 2018
- K. Krasich, R. McManus, S. Hutt, M. Faber, S. K. D'Mello, and J. R. Brockmole, Gaze-based indices of mind wandering during real-world scene processing. Annual Workshop on Object Perception, Attention, and Memory., Vancouver, BC, Canada., Nov. 2017

INVITED PRESENTATIONS	59. <b>S. Hutt</b> , <i>Good vs. good enough using low-cost sensing for user modelling</i> Society for Computation in Psychology - Presidential Symposium, Nov. 2022		
	60. J. L. Ocumpaugh, <b>S. Hutt</b> , A. Munshi, R. S. Baker, G. Biswas, <i>Quick red fox : Optimizing classroom interviews with srl and</i> Learning Analytics Learning Network, Aug. 2021	and L. Paquette, I affect detection,	
Research Funding	CueThinkEF+ \$180,000 to DU <i>AERDF, EF+Math</i>	2024-2025	
	Making learning visible: scalable, multi-system detection of self-reg EF \$23,923 to DU	ulation related to 2023	
	AERDF, EF+Math Collaborative Research: Frameworks: Cyber Infrastructure for St and Experimental Research in Online Learning \$49,727 to DU National Science Foundation	nared Algorithmic 2022	
	Faculty Research Fund \$3,000 <i>University of Denver</i>	2022	
Personal Funding	Gary Marsden Travel Award \$1,600 <i>SIGCHI</i>	June 2022	
	Department of Computer Science Student Travel Award \$1,600 <i>University of Colorado Boulder</i>	May 2019	
	Department of Computer Science Student Travel Award \$1,000 <i>University of Colorado Boulder</i>	March 2018	
	College of Engineering Student Travel Award \$400	March 2018	
	College of Engineering and Applied Sciences, University of Colorado Boulder		
	Dean's Graduate Assistantship, CU Boulder \$21,800 College of Engineering and Applied Sciences, University of Colorado	August 2017 Die Boulder	
	SIGCHI Student Travel Grant \$1,800 SIGCHI	August 2016	
	Social Responsibilities of Research Fellowship \$1,500 John J. Reilly Center for Science, Technology, and Values	May 2016	
	Student Travel Scholarship \$4,500 (paid in GBP) <i>University of York</i>	April 2011	

AWARDSBest Paper Honorable Mention, L@S 2023July 2023Best Paper Award, AIED 2021June 2021Outstanding Service Award, Department of Computer ScienceMay 2019Outstanding Service Award, Department of Computer ScienceMay 2018James Chen Best Student Paper Award, UMAP 2017July 2017SIGCHI Student ScholarMarch 2017Outstanding Student AwardJuly 2011

TEACHING Assistant Professor EXPERIENCE Introduction to Artificial Intelligence Department of Computer Science, University of Denver

Designed and implemented a broad survey class, considering a range of Artificial techniques, and how they relate to current socio-political discussions. Students engage in regular discussion and debate, as well as programming assignments and building theoretical foundations.

# Introduction to Programming I

Department of Computer Science, University of Denver

Designed and implemented (in collaboration with colleagues) the introductory course for Computer Science major and minors. Work with students from across campus to build their proficiency in programming and Computer Science topics more broadly.

# Advanced Topics In Artificial Intelligence

Department of Computer Science, University of Denver

Lead students in advanced discussion of the applications of Artificial Intelligence, including ethics and human impacts.

# Instructor

# Introduction to Artificial Intelligence

Department of Computer Science, University of Colorado Boulder

Designed and implemented the curriculum, assignments and examinations. Held weekly classes, managed course staff of four people, and mentored students during office hours. 106 students enrolled

#### Teaching Assistant Introduction to Computer Science Instructor: David Knox, Ph.D

Department of Computer Science, University of Colorado Boulder

Taught two lab sections with approximately 30 students each, prepared weekly assignments and autograders, assisted with the devlopment of examinations, and mentored students during office hours.

# Teaching Assistant

# Design and Analysis of Algorithms

Instructor: Danny Z. Chen, Ph.D Department of Computer Science, University of Notre Dame

Fall '17

Spring '19

Fall '15

Fall '22 - Present

	Assisted with the development of written assignments and examinations. Mentored students during weekly office hours and review sessions. 94 students enrolled	
	TutorFall '13 - Spring '15Mathematics and Computer ScienceHighcliffe School	
Professional Membership	Association for Computing Machinery International Educational Data Mining Society International Artificial Intelligence in Education Society Cognitive Science Society Society for Learning Analytics Research ACM Special Interest Group on Computer-Human Interaction (SIGCHI) ACM Special Interest Group on Computer Science Education (SIGCSE)	
Journal Reviews	Learning and Individual Differences Journal of Educational Psychology British Journal of Educational Technology Journal of Educational Data Mining Journal of Learning Analytics Frontiers in Artificial Intelligence International Journal of Artificial Intelligence in Education Computers in Human Behaviour Advances in Methods and Practices in Psychological Science Journal of Research on Educational Effectiveness Review of Research in Education IEEE Transactions on Visualization and Computer Graphics Consciousness and Cognition IEEE Transactions on Learning Technologies IEEE Transactions on Big Data	
Conference Reviews	Learning Analytics and Knowledge (LAK), 2022, 2024 American Education Research Association (AERA), 2022, 2023 ACM Symposium on Eye Tracking Research and Applications (ETRA), 2022 International Conference on Educational Data Mining (EDM) 2017, 2018, 2019, 2020 International Conference on Artificial Intelligence in Education (AIED), 2017-2024 International Conference on Multimodal Interaction (ICMI) 2019, 2020, 2024 ACM Conference on Computer-Supported Cooperative Work and Social Computing 2019 ACM CHI Conference on Human Factors in Computing Systems 2019-2022	
DISSERTATION COMMITTEES	Ali Pourramezan Fard Spring 2023 Department of Computer Science, Univeristy of Denver Juan Miguel Andres-Bray Fall 2021 Graduate School of Education, Univeristy of Pennsylvania	
Masters Committees	Ryan Dunagan Spring 2023 Department of Computer Science, Univeristy of Denver Naheem Noah Spring 2024 Department of Computer Science, University of Denver	
Advisees	PhD. Students	
	Demi Jaiyeola 2023 - Present	

	Masters Students		
	Aaron Martin Juan Malaver Alvarado	2023 - Present 2023 - Present	
Mentorship	PhD. Students		
	Juan Miguel Andres-Bray J. M. Alexandra Andres Joyce Zhang	2020 - 2022 2020 - Present 2020 - Present	
	Masters Students		
	Alexander White Yiqiu Zhou Tetsumichi Umada Phu Dang Sayali Sonawane	2020 - 2021 2020 - 2021 2019 - 2020 2018 2018	
	Undergraduate Students		
	Hector Rodriguez Grayson Hieb Dan Laskarzewski Ray Zhang Alexander Tobias Frank Stinar David Blair Kendyll Kraus	2023 - Present 2023 - Present 2023 2021 - 2022 2021 2019 - 2020 2017 - 2019 2017	
	High School Studente	2010 2017	
	Jack Rogers Connor Malley Taylor Kovacs	2019 2019 2016-2017	
Academic Service	Broader Research Community		
	Associate Chair, ACM CHI Conference on Human Factors in Computing Systems 2024		
	Program Committee, International Conference of Human Factors in Computing Systems 2024 Program Committee, International Conference of the Learning Sciences 2023 Program Committee, Learning Analytics and Knowledge 2023, 2024 Hybrid Experience Chair, Educational Data Mining 2022		
	Program Committee, International Conference on Multimodal Interaction 2022 Program Committee, ACM Symposium on Eye Tracking Research and Applications 2022		
	Program Committee, Educational Data Mining 2022 Program Committee, Artificial Intelligence in Education 2022 Program Committee, International Conference on Multimodal Interaction 2021 Program Committee, Artificial Intelligence in Education 2021		
	Program Committee, International Conference o Program Committee, Artificial Intelligence in Edu	n Multimodal Interaction 2020 ucation 2020	

Program Committee, Educational Data Mining 2020

Local Committee, International Conference on Multimodal Interaction 2018 Program Committee, Educational Data Mining 2017

#### **Department and Institution Level**

Computer Science Search Committee, University of Denver, 2023/2024 Computer Science Graduate Advising Committee, University of Denver, 2023/2024 Justice, Equity, Diversity and Inclusion Committee, University of Denver, 2022 -Present Computer Science Search Committee, University of Denver, 2022/2023 Student Lead, CS Orientation, CU Boulder, 2019 Student Lead, CS Open House, CU Boulder, 2019 Graduate Committee, Department of Computer Science, CU Boulder, 2017-2019 Chair, Computer Science Graduate Student Association, CU Boulder, 2018, 2019 Committee to review graduate degree requirements, Department of Computer Science, CU Boulder 2018 Founder Member, Computer Science Graduate Student Association, CU Boulder,

2018

Judge, N. Indiana Regional Science and Engineering Fair 2016

### **Community Service**

Board of Directors, Rocky Mountain Arts Association, 2021 - Present Board Treasurer, Rocky Mountain Arts Association, 2021 - Present

#### PROFESSIONAL Senior Timetabling Assistant & Curriculum Support March 2014 - July 2017 EXPERIENCE Highcliffe School

Worked with Senior & Middle Management to implement a curriculum model that satisfies national and internal constraints. Managed post-16 curriculum enrolment, insuring that all legal requirements were met and that students had a suitable program of study. Developed of a variety of online education solutions.

# IT Technician & Timetabling Assistant

July 2011 - March 2014

Highcliffe School

Worked with a wide variety of stakeholders to provide IT solutions. Communicated with users with a variety of skill levels and devloping solutions to complex education problems.