

Dr. Shaun Wallace

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Academic Positions

Assistant Professor

Kingston, RI

UNIVERSITY OF RHODE ISLAND, DEPT. OF COMPUTER SCIENCE AND STATISTICS

Aug 2023 - Current

- Director: Human-Centered Experiential Technologies (HAX) Lab
- Co-Director: Virtual Readability Lab
- Chair and Faculty Senator 2025/26: Technology and Infrastructure Committee
- Faculty Senator 2024/25: Curriculum and Standards Committee
- Research Associate: The Readability Consortium
- Research Associate: Univ. of Rhode Island Engineering for Democracy Institute

Education

Brown University, Dept. of Computer Science

Providence, RI

PHD COMPUTER SCIENCE

2023

- Advisor: Jeff Huang
- Thesis: Public Data Systems for Evolving Information

Brown University, Dept. of Computer Science

Providence, RI

MSC COMPUTER SCIENCE

2017

University of Limerick, Dept. of Computer Science and Information Systems

Limerick, IE

MSC MUSIC TECHNOLOGY, 1ST CLASS HONOURS

2009

- Advisor: Kerry Hagan
- Thesis: Real-time Audio Spectra Manipulation with Adaptive FM Synthesis

University of Rhode Island, College of Business

Kingston, RI

BSC MANAGEMENT SCIENCE & INFORMATION SYSTEMS, SUMMA CUM LAUDE

2008

Previous Industry Experience

Lead Systems Programmer

Providence, RI

BROWN UNIVERSITY, DEPT. OF COMPUTER SCIENCE

Jan 2018 - Jul 2023

Research Intern

Cambridge, MA

ADOBE, CREATIVE INTELLIGENCE LAB

Jul 2019 - May 2022

Senior Application Developer

Providence, RI

BROWN UNIVERSITY, ICERM

Mar 2011 - Aug 2017

RPS Group

South Kingstown, RI

SOFTWARE DEVELOPER

Jul 2010 - Nov 2010

University of Rhode Island, Division of Student Affairs

Kingston, RI

WEB DEVELOPER

Jan 2010 - Jun 2010

University of Rhode Island, Conference Services & Special Program Development

Kingston, RI

WEB DEVELOPER

May 2005 - Dec 2009

Publications

Towards Fair and Equitable Incentives to Motivate Paid and Unpaid Crowd Contributions [link]

CHI 25

WALLACE S., MASSACHI T., SU J., MILLER D., AND HUANG J.

Chirp: The Impact of Private Online Self-Disclosure on Perceived Social Support [link]

CSCW 24

MASSACHI T., ROY J., CHOI L., HOEFER G., WALLACE S., HUANG J.

Digital Reading Rulers: Evaluating Inclusively Designed Rulers for Readers With and Without Dyslexia [link]

CHI 23

NICKLAUS A., CAI T., BYLINSKI Z., WALLACE S.

Web Table Formatting Affects Reading Speed on Mobile Devices [link]

WWW 23

TENSMeyer C., BYLINSKI Z., CAI T., MILLER D., NENKOVA A., NIKLAUS A., WALLACE S.

Towards Individuated Reading Experiences: Different Fonts Increase Reading Speed for Different Individuals [link]

TOCHI 22 [Journal]

WALLACE S., BYLINSKII Z., DOBRES J., KERR B., BERLOW S., TREITMAN R., KUMAWAT N., ARPIN K., MILLER D., HUANG J., SAWYER B.

Readability Research: An Interdisciplinary Approach [link]

FnT HCI [Journal]

27* CO-AUTHORS CONTRIBUTED EQUALLY

Personalized Font Recommendations: Combining ML and Typographic Guidelines to Optimize Readability [link]

DIS 22

CAI T., WALLACE S., REZVANIAN T., DOBRES J., KERR B., BERLOW S., HUANG J., SAWYER B., BYLINSKII Z.

The TESS Triple-9 Catalog: 999 Uniformly Vetted Exoplanet Candidates [link]

MNRAS 22

CACCIAPUOTI L., KOSTOV V., KUCHNER M., QUINTANA E., COLÓN K., BRANDE J., MULLALLY S., CHANCE Q., CHRISTIANSEN J., AHLERS J., DI FRAIA M., DURANTINI LUCA H., IENCO R., GALLO F., DE LIMA L., HYOGO M., ANDRÉS-CARCASONA M., FORNEAR A., DE LAMBILLY J., SALIK R., YABLONSKY J., WALLACE S., ACHARYA S.

Case Studies on the Motivation and Performance of Contributors Who Verify and Maintain In-Flux Tabular Datasets [link]

CSCW 2021 [Journal]

WALLACE S., PAPOUTSAKI A., TAN N. H., GUO H., HUANG J.

Optimizing Electronic Health Records Through Readability [link]

HFES 21

BALL R.V., MILLER DB, WALLACE S., MACIAS K.C., IBRAHIM M., GONZAGA ER., KARASIK O., ROHLSSEN-NEAL D.R., BARRIENTOS S., ROSS E.A, ASMAR A., HUGHES A.M., HANCOCK P.A, SAWYER B.

Sketchy: Drawing Inspiration from the Crowd [link]

CSCW 20 [Journal]

WALLACE S., LE B., LEIVA L., HAQ A., KINTISCH A, BUFREM G., CHANG L., HUANG J.

Drafty: Enlisting Users to be Editors who Maintain Structured Data [link]

HCOMP 17

WALLACE S., VAN KLEUNEN L., AUBIN-LE QUERE M., PETERKIN A., HUANG Y., HUANG J.

Publications Short Papers

Priming at Scale: An Evaluation of Using AI to Generate Primes for Mobile Readers [link]

CHI LBW 2025

NAMRATA SRIVASTAVA, JENNIFER HEALEY, RAJIV JAIN, GUANLI LIU, YING MA, BORANO LLANA, DRAGAN GASEVIC, TILMAN DINGLER, SHAUN WALLACE

Research Methods for People in a Hurry[link]

CHI Course 2025

DAVE B MILLER, SHAUN WALLACE

VizieR Online Data Catalog: TESS Triple-9 Catalog (Cacciapuoti+, 2022)[link]

VizieR 2025

L CACCIAPUOTI, VB KOSTOV, M KUCHNER, EV QUINTANA, KD COLON, J BRANDE, SE MULLALLY, Q CHANCE, JL CHRISTIANSEN, JP AHLERS, MZ DI FRAIA, LUCA HA DURANTINI, RM IENCO, F GALLO, LT DE LIMA, M HYOGO, M ANDRES-CARCASONA, AU FORNEAR, JS DE LAMBILLY, R SALIK, JM YABLONSKY, S WALLACE, S ACHARYA

AnVILMEDFORD: Documenting Cloud-Based Analysis Projects Using the MEDFORD Metadata Language[link]

IEEE Big Data 2024

BENJAMIN STUBBS, POLINA SHPILKER, MICHAEL SAYERS, SHAUN WALLACE, NOAH M DANIELS, ALVA COUCH

Cross-referencing Metadata through an extension of the MEDFORD language [link]

MTSR 24

SHPILKER P., STUBB B., SAYERS M., COWEN L., WALLACE S., COUCH A., DANIELS N.

MuM'23 Workshop on Interruptions and Attention Management: Exploring the Potential of Generative AI - Generative Primes and Summaries for Reading in Distractive Environments [link]

AMSWs 23

DINGLER T., SRIVASTAVA N., WALLACE S.

Asynchronous Collaboration Systems for Evolving Information [link]

CHI DC 22

WALLACE S.

Debiased Label Aggregation for Subjective Crowdsourcing Tasks [link]

CHI LBW 22

WALLACE S.*, CAI T.*, LE B., LEIVA L.* (*EQUAL CONTRIBUTIONS)

Accelerating Adult Readers with Typeface: A Study of Individual Preferences and Effectiveness [link]

CHI LBW 20

WALLACE S., TREITMAN R., HUANG J., SAWYER B., BYLINSKII Z.

Visualizing Self-Trackd Mobile Sensor and Self-Reflection Data to Help Sleep Clinicians Infer Patterns [link]

CHI LBW 17

WALLACE S., SASSON D., GUO H.

Workshop Organizer and Papers

Readability Workshop 2: Inclusive Metrics and Design [link]

VSS 2025

NILSU ATILGAN, SHAUN WALLACE, BEN D. SAWYER

Small Abstracts, Invited Talks, and Grants

POSTER ABSTRACTS

Typography and Pupilometry: Exploring the Speed, Comprehension, and Concentration Trade-Off in Reading [link]

VSS 25

LLANA B., KUSHAS KHADKA K., SUHAIL Y., ALISA BARON A., WALLACE S.

A Psychophysical Approach for Investigating Format Readability Online [link]

VSS 24

KÜÇÜK KM., RASHID MD M., PENKOVA V., GIROUX A., ATILGAN N., WALLACE S., BERLOW S., KOSOVICHEVA A., DAY S., SAWYER B.

Space for Readability: Effects on Reading Speed from Individuated Character and Word Spacing [link]

VSS 22

WALLACE S., DOBRES J., SAWYER B., BYLINSKII Z.

Readability for All: The Effect of Individualized Font Formats on Reading Speed and Comprehension for Students in Grades 3-8 [link]	SSSR 22
DAY S., SAWYER B., WALLACE S., TREITMAN R., CROWLEY K., JORDAN M.	
Considering the Speed and Comprehension Trade-Off in Reading Mediated by Typography [link]	VSS 21
WALLACE S., DOBRES J., SAWYER B.	
Improving Reading Outcomes Using Digital Reading Rulers for Readers With & Without Dyslexia [link]	VSS 21
WATSON A., WALLACE S.	
Individual Differences in Font Preference & Effectiveness as Applied to Interlude Reading in the Digital Age [link]	VSS 20
WALLACE S., TREITMAN R., HUANG J., SAWYER B., BYLINSKII Z.	
<i>Presented as a Talk</i>	

GRANTS FUNDED AND AWARDS

2024-25	Award , PLEJ: Partnership for Large Election Jurisdictions	\$358,658
2025	Tuition Scholarship Award , University of Rhode Island Graduate School	\$66,000
2025	Arts & Sciences Student Fellow Award (x2) , University of Rhode Island College of Arts & Science	\$8,000
2024	Low-Code Center of Excellence Platform: Phase 1 , United States Air Force, STTR	\$100,000
2024	Tuition Scholarship Award , University of Rhode Island Graduate School	\$66,000

INVITED TALKS

2024	The Vision Science of Digital Readability: Community-Building Workshop , Towards Controlling the Physical Size of Text on Different Screens
2024	NASA Cit Sci Leader Series , Why do they do it? Motivations of paid and unpaid participants
2024	AI Summit at the University of Rhode Island , Nurturing Critical Thinking in the Age of Generative AI: a dialog on educational strategies
2024	The Readability Consortium: Monthly Sync , Font Size Normalization: Why it Matters?
2023	Apple , Readability Research and Personalization
2022	Skoll World Forum , Building Better Reading Through Personalized Digital Text
2022	Skoll World Forum , Building Better Reading Through Personalized Digital Text
2022	Adobe for Education Summit , Readability Session
2021/22	Adobe Tech Summit , Inventing Beyond Barriers: Readability Research & Impact
2021	Adobe Readability Research Symposium , Personalizing Fonts to Increase Reading Speed
2021	Adobe Education Leadership Summit , Personalized Formatting for Better Readability
2019	University Central Florida: HCI Course , Building Collaborative Research Systems
2015	Microsoft NERD: Quantified Self on Personal Informatics , N=1: Food and Drink Affects on Weight

Teaching, Mentorship, Service, Awards, & Press

TEACHING

2023-2026	Instructor , Operating Systems & Networks, University of Rhode Island	CSC 412
2026	Instructor , Distributed Systems, University of Rhode Island	CSC 512
2024,26	Instructor , Human Computer-Interaction, University of Rhode Island	CSC 521
2025	Instructor , Adv. Topics in Software Engineering, University of Rhode Island	CSC 505
2024	Instructor , Designing Interactive Systems, University of Rhode Island	CSC 592-DIS
2023	Guest Lecture and Syllabus Design , User Interfaces & User Experience, Brown University	CSCI 0130
2022	Guest Lecture , Computer Interface Design, Tufts University	
2022	CHI Course , Research Methods for People in a Hurry: An introduction to research methods in computer-human interaction, psychology, and human factors	
2022	Guest Lecture , A/B Testing, Brown University Medical School	
2021	Guest Lecture , Web Development 2 – Back-End Engineering, University of Luxembourg	
2021	Guest Lecture , User Interfaces & User Experience, Pomona College	
2020	Run Crowdsourcing Assignment , Human-Computer Interaction Seminar, Brown University	CSCI 2300
2018	Guest Lecture , User Interfaces & User Experience, Brown University	CSCI 130/1300
2018	Guest Lecture , Human-Computer Interaction Seminar, Brown University	CSCI 2300
2018	Run Crowdsourcing Assignment , Human-Computer Interaction Seminar, Brown University	CSCI 2300
2017	Graduate Teaching Assistant , User Interfaces & User Experience, Brown University	CSCI 130/1300
2016	Teaching Assistant , User Interfaces & User Experience, Brown University	CSCI 1300

SERVICE

CHI	AC , 2025, 2026
CHI	Reviewer , 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026
CHI LBW	Reviewer , 2017, 2020, 2025
CHI Play	Reviewer , 2019
CIKM	PC Member & Reviewer for Abstracts , 2020
CSCW	Reviewer , 2020, 2021, 2022, 2023, 2025
DIS	Reviewer , 2025
HCOMP	Reviewer , 2017, 2019
IJHCI	Reviewer , 2020
SIGIR	Reviewer , 2018
WWW Dev	PC Member & Reviewer , 2018
UIST	Reviewer , 2018, 2021, 2025

MENTORSHIP

(1 Co-Author Published Paper) (2 Developed Open-Source Software) (3 Won Award/Scholarship)

2025-Now **Kat Toolan**², University of Rhode Island
2025-Now **Genevieve Drouin**², University of Rhode Island
2025-Now **Simeon Larinde**², University of Rhode Island
2025-Now **Matthew McCune**², University of Rhode Island
2025-Now **Emory Salaun**², University of Rhode Island
2025-Now **Jenny You**², University of Rhode Island
2025-Now **Lily Nguyen**², University of Rhode Island
2025-Now **Parker Holand**^{2,3}, University of Rhode Island
2025-Now **Francisco Xavier Falves Pereira**², University of Rhode Island
2024-Now **Aidan Leach**^{2,3}, University of Rhode Island
2024-Now **Liam Washburn**^{2,3}, University of Rhode Island
2024-Now **Brandt Ogden**², University of Rhode Island
2024-25 **Jacob Hyun**², University of Rhode Island
2024 **Sean Phelan**, University of Rhode Island
2024-25 **Shina Adewumi**², University of Rhode Island
2024-Now **Nadia Sousa**, University of Rhode Island
2024-25 **Marcin Pawlukiewicz**², University of Rhode Island
2024-25 **Max Mercurio**², University of Rhode Island
2024 **Reid Morin**, University of Rhode Island
2024-Now **Maedeh Hosseinpoor**², University of Rhode Island
2024-Now **Borano Llana**^{1,2}, University of Rhode Island
2024 **Michael Sayers**^{1,2}, University of Rhode Island
2023-25 **Kushas Khadka**^{1,2,3}, University of Rhode Island
2023-Now **Yusra Suhail**^{1,2}, University of Rhode Island
2022 **Jiaqi Su**², Brown University
2020-21 **Long Do**², Brown University *now at Meta*
2019-21 **Diana Lee**², Brown University *now at Meta*
2020 **Alice Marbach**², Brown University *now at Audible*
2019-20 **Matthew Bejtlich**, Rhode Island School of Design
2019-20 **Zhengyi Peng**², Brown University, *now at Microsoft*
2018-19 **Brendan Le**^{1,2}, Brown University, *now at Uncountable*
2019 **Michael Bardakji**, Brown University, *now at Vetcove*
2018-19 **Neilly Tan**^{1,2}, Brown University, **now a PhD at Univ. of Washington**
2018 **Ari Kintisch**^{1,2}, Brown University, *now at Squarespace*
2018 **Andrew Park**, Brown University, *now a PhD Student at CMU*
2017-18 **Gabrielle Bufrem**¹, Brown University, *now at Pivotal Labs*
2017-18 **Aman Haq**^{1,2}, Brown University, *now at Microsoft*
2017 **Linda Chang**^{1,2}, Brown University, *now at Nasdaq*
2017 **Aarthi Anbalagan**², Brown University, *now at Microsoft*
2017 **Abraham Peterkin**¹, Brown University, *now at Nickelodeon*
2017 **Yirui Huang**^{*1}, Brown University & Univ. of Toronto, *now at Univ. of Edinburgh*
2016 **Marianne Aubin-Le Quere**^{1,2,3}, Brown University, **now faculty at University of Illinois**
2016 **Lucy Van Kleunen**^{1,2,3}, Brown University, **now a PhD at Univ. Colorado**

TRAINING

2022 **Certificate II: Sheridan Teaching Seminar - Course Design**, Brown University
2021 **Certificate I: Sheridan Teaching Seminar - Reflective Teaching**, Brown University
2016 **Teaching Assistant Diversity Sensitivity**, Brown University
2016 **Leadership Certification Program**, Brown University

VOLUNTEER

2025 **Industry Panel Organizer: CrowdStrike and MojoTech**, University of Rhode Island
2024-25 **Workshop: Pathways to Success in Computer Science**, University of Rhode Island
2025 **Guest Reader CS Topics and Stories**, Frenchtown Elementary East Greenwich, RI
2024 **Guest Reader Build-a-Book Activity using genAI**, Frenchtown Elementary East Greenwich, RI
2021-22 **PhD Office Hours**, Brown University, **Co-Created*
2017-18 **First Year PhD Mentorship Program**, Brown University
2017 **Student Volunteer**, HCOMP
2008-09 **After Hours Coding Help**, University of Limerick, **Created*

AWARDS

2022 **illumi Award**, UserTesting.com
 2021 **Fast Company's Annual List of World-Changing Ideas**, Fast Company
 2020 **1st Place in the Just Do It Category - Digital Reading Rulers**, Adobe Hackweek
 2020 **Sigma Xi Honor Society**, Brown University
 2017 **Graduate Fellowship**, Brown University
 2009 **President's Letter for Academic Excellence**, University of Limerick
 2008 **Golden Key International Honor Society**, University of Rhode Island
 2004 **Beta Gamma Sigma Honor Society**, University of Rhode Island

PRESS AND MEDIA

2024 **Univ. of Rhode Island**, URI engineering professor working to make voting processes run smoothly
 2024 **Run: Outside Interactive, Inc.**, Can ChatGPT Train Me for the Boston Marathon?
 2023 **Readability Matters**, Readability Community Interview: Dr. Shaun Wallace
 2023 **The Washington Post**, What's your type? Try these tests to pick the perfect font for you.
 2022 **Nielsen Norman Group**, Best Font for Online Reading: No Single Answer
 2022 **Prolific**, Conduct your best research
 2022 **Fast Company**, Are some fonts ageist?
 2022 **Adobe**, Blog post: Readability Research: This New Field Can Help Us All Read Better
 2021 **Adobe**, Blog post: Read different: User-centered approaches improve reading for all
 2021 **Adobe**, Blog post: Re-imagining Reading
 2021 **Readability Matters**, A Collaborative Interdisciplinary Readability Research Approach
 2021 **Readability Matters**, Optimizing Electronic Health Records Through Readability
 2021 **Hacker News**, Computer Science Open Rankings
 2021 **South by Southwest: Digital Reading Rulers**, * Presented by Collaborator
 2021 **Axe-Con: Virtual Readability Lab & Digital Reading Rulers**, * Presented by Collaborator
 2020 **Adobe MAX: This Changes Everything: New Approaches to Reading**, * Presented by Collaborator
 2020 **Fast Company**, Finalist for Fast Company's Annual List of World-Changing Ideas
 2020 **EdTech Center World Education**, Readability Features & Technology for Better Reading
 2020 **Readability Matters**, Individual Differences in Font Preference & Effectiveness
 2020 **Readability Matters**, Using the Virtual Readability Lab with College Students
 2020 **Readability Matters**, Virtual Readability Lab Launched
 2020 **Readability Matters**, Accelerating Adult Readers With Typeface
 2019 **Readability Matters**, Towards Readability Individuation

Research Systems and Datasets

VoteLayout

INTERACTIVE 2D DESIGNER FOR PHYSICAL VOTING SPACES FOR ELECTION OFFICIALS
 App: <https://votelayout.app/>
 Code: TBA

System

* Mentored Undergraduate Students

HABIT

HABIT: HUMAN AGENT BEHAVIORAL INTERACTION TOOLKIT
 App: <https://www.habitsimulation.xyz/>
 Code: TBA

System

* Mentored Undergraduate Students

Insight-ED

A CHROME EXTENSION FOR AI-SUPPORTED CODE TUTORIALS ON YOUTUBE
 App: TBA
 Code: TBA

System

* Mentored Undergraduate Students

SEA-u-lator

SOCIAL ENGINEERING ATTACK SIMULATOR: CHROME EXTENSION FOR PRIVACY-PRESERVING PHISHING ATTACK TUTORIALS AND ONLINE PORTAL.
 App: TBA
 Code: TBA

System

* Mentored Undergraduate Students

Flexibility AI

AN ONLINE TOOL TO REFORMAT TEXT PASSAGES AND GENERATE COMPREHENSION QUESTIONS FOR K-12 TEACHERS.
 App: <http://44.220.152.98:3000/>
 Code: TBA

System

* Mentored Graduate Student

The Virtual Readability Lab

PERSONALIZED READABILITY EXPERIMENTS IN THE WILD
 App: <https://readabilitylab.xyz>

System

Drafty: A Smarter Wiki for Data

AN INTELLIGENT WEB-BASED SPREADSHEET WHERE UNPAID CONTRIBUTORS MAINTAIN EVOLVING DATA.

App: <https://drafty.cs.brown.edu>

Code: <https://github.com/brownhci/drafty>

System

CS Open Rankings

A META RANKER USING REAL-TIME DATA FROM CS PROFESSORS AS ONE OF ITS SOURCES

App: <https://drafty.cs.brown.edu/csopenrankings>

System

Computer Science Faculty Dataset

OVER 5000 CS FACULTY PROFILES FROM TOP US AND CANADIAN UNIVERSITIES

Data: <https://drafty.cs.brown.edu/csprofessors>

Data

Sketchy

A REMOTE ASYNCHRONOUS SKETCHING CLASSROOM

App: <https://sketchy.cs.brown.edu>

Code: <https://github.com/brownhci/sketchy-1.0>

System

Subjective Binary Labels for Sketches

LABELED INSPIRATIONAL SKETCHES FROM UI/UX CLASSROOMS

Data: <https://github.com/brownhci/sketchy-1.0/tree/master/data>

Data

PolyMu JS Library

OPTIMIZED LOAD TIME, INDEXING, AND SCROLLING OF MASSIVE HTML TABLES

App: <https://github.com/pengzhengyi/polymu>

Library

** Mentored Undergraduate Student*

FontView Web App

EXTRACTING ACCURATE FONT ATTRIBUTES FROM VECTOR PATHS

App: <https://font-metrics.herokuapp.com>

Code: <https://github.com/TianyuanCai/font-metrics>

System