Dashiel Carrera

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EDUCATION

Ph.D., Fully Funded

University of Toronto, Toronto, ON 2026 (Prospective)

Computer Science, Human-Computer Interaction

M.F.A., Fully Funded

Virginia Polytechnic Institute and State University, Blacksburg, VA 2021

Fiction, New Media Writing, 4.0 GPA

A.B., With Honors

Brown University, Providence, RI Literary Arts, Computer Science

RESEARCH

NRG, University of Toronto (link)

Current

Graduate Research Assistant, under Pfr. Daniel Wigdor

- Research Creativity Support, AI-Human Collaboration, and Cognition
- Research future of writing and reading in AR (Hololens)

Intelligent Adaptive Interventions Lab, University of Toronto (link) Fall 2021 Graduate Research Assistant, under Pfr. Joseph Jay Williams

- Research adaptive explanations in Computer Science coursework using Multi-Armed Bandit algorithms
- A/B testing a variety of different linguistic and design factors to maximize student attention and comprehension

Echo Lab, Virginia Tech (link) Winter 2020-Spring 2021 Graduate Research Assistant, under Pfr. Sang Won Lee

- Researched the effects of watching real-time writing process playback on reading comprehension and user engagement
- Developed web modules, created user study survey, and conducted ethnographic research interviews with writers (JavaScript, CodeMirror, AmazonTurk)
- Carrera, Dashiel, Lee, Sang Won. "Watch Me Write: Revealing Creative Process with Writing Replay" Creativity & Cognition 2022.

metaLAB at Harvard (link)

Summer 2017

Digital Humanities Research Intern, under Pfr. Jeffrey Schnapp

- Wrote article on the use of LDA topic modeling to generate novel academic disciplines for course search based on Harvard's corpus of course data (SciPy, NLTK, gensim)
- Created website that enables users to visually explore 100 years of Harvard's educational data (Elasticsearch, PostgreSQL)

Opera of the Future, MIT Media Lab (link) Research Developer, under Pfr. Tod Machover

Summer 2014

- Developed interface and communication modules for OSC and other protocols networked together for live production system (JavaScript)
- System later used as part of Ariana Grande Honeymoon Tour

NEXA Center for Internet and Society (link) Research Developer, under Dr. Simone Basso Fall 2012

- Developed modules client-side for TellMeFirst, tool for enriching textual documents via Linked Open Data (JavaScript, HTML, CSS)
- Developed new data storage system and frontend module for Neubot, net neutrality monitoring system (Python, JavaScript, HTML, CSS, sqlite)

Mirny Lab, MIT (link)

January 2011 to September 2012

PRIMES Computational Biology Researcher, under Pfr. Leonid Mirny

• Made computer model that found role of cell fusion in cancer; presented at MIT (Python, SciPy, Computing Cluster)

GRANTS + AWARDS

Institute for Creativity, Arts, and Technology Student Seed Grant 2019, \$1000 Interactive 3D model and bilingual storytelling adaptation of Jorge Luis Borges's Zoología Fantastica projected onto fog. (Three.js, Logic, Ableton)

International Initiative Grant 2020, \$450

Received additional funding to display *Zoología Fantastica in the Mist* downtown to promote international learning and cross-cultural empathy.

Emily Morrison Prize in Poetry 2020, 1st Place, \$1000

Judged by Magdalena Zurawski who said, "A fraught surrealism deftly assembles these imagistic poems into landscapes of failed psychic escapes."

Brown University Creative Arts Council Grant 2014, \$1000

Customized light waterfall pattern generated based on ID swipe mapped realtime to RGB NeoPixels. (Processing, Arduino)

WXIN Rock Hunt 2016, 1st Place, \$1000

Received grand prize of \$1000 for winning Providence battle of the bands with my band Feng Shui Police.

ACM SIGCHI Gary Mardsen Travel Award 2022, \$1390

Received travel grant to present paper "Watch Me Write: Revealing Creative Process with Writing Replay" at Creativity & Cognition in Venice, Italy.

Virginia Tech Graduate Teaching Fellowship 2022, \$20,700 per year

Fully funded for Masters of Fine Arts in Creative Writing through a teaching fellow-ship.

University of Toronto Graduate Research Fellowship, Department of Computer Science 2022, \$26,229 CAD per year

Fully funded to conduct Human-Computer Interaction research at the University of Toronto through a research fellowship.

University of Toronto School of Cities Grant 2022, \$500CAD

Received grant to perform interview study with prison and police abolitionists in North America on their concerns and desires for visibility in digital mapping tools.

University of Toronto Mississauga Travel Grant 2022, \$2500 CAD

Received travel grant to present paper "Watch Me Write: Revealing Creative Process with Writing Replay" at Creativity & Cognition in Venice, Italy.

University of California, Santa Cruz Chancellor's Award 2022, \$30,000 (declined) UCSC's highest fellowship honor. Awarded to PhD applicants by nomination from department and selection of Graduate Council.

HackPrinceton Crowd Favorite 2013, \$1000

Received prize for creation of PersonalRave, a mask which maps the light intensity in the surrounding environment to a series of secondary colors for the wearer of the mask. (Arduino)

HackCooper 2nd Place 2011, \$666

HighFrequencyStrealing: 2 player speed reaction game where every round the loser automatically makes a small Venmo transfer to the loser. (Arduino, Processing, GoogleAppEngine, Python)

ACADEMIC PUBLICATIONS

- 1. Carrera, Dashiel, Lee, Sang Won. "Watch Me Write: Revealing Creative Process with Writing Replay" In Creativity & Cognition. Venice, Italy 2022.
- 2. Carrera, Dashiel, Ovienmhada, Ufuoma, Hussein, Safa, and Robert Soden. "Roadmap to Abolition: A Counter-mapping Project to Advance Understanding of the Theory and Practice of Abolition" In There is No Justice, Just US, CHI Worksop. New Orleans, LA 2022.
- 3. Thompson, Tyechia, Carrera, Dashiel. "Afrofuturist Intellectual Mixtapes: A Classroom Case Study" In Digital Humanities Quarterly. Boston, MA, 2021.
- 4. Carrera, Dashiel. "Finding the Missing Departments: Topic Modeling in the Harvard Course Catalog" In Harvard's metaLab medium. Cambridge, MA, 2017.

TEACHING

University of Toronto

Tutorial TA INF 2178 Experimental Design for Data Science (Grad level) Spring 2022

• Lead tutorial for graduate level course examining the implementation and policy implications of different data science algorithms

Tutorial TA CSC 119 Intelligence: Artificial and Human

Spring 2022

- Lead tutorials on the ethical implications of artificial intelligence, as presented in philosophy, history, and literature
- Provide feedback on student papers

Tutorial TA CSC 110 Foundations of Computer Science I

Fall 2021

• Led tutorials and helped students with coding and computational complexity proofs (Python, Big-O)

Virginia Polytechnic Institute and State University

Instructor ENGL 2744 Creative Writing (Online)

Spring 2021

- Wrote lesson plans, created syllabus, lectured, led discussion, and gave feedback on 20 students' creative works
- Taught CNF, poetry, fiction, and New Media writing

Instructor ENGL 5974 Editing a Digital Journal (Grad level)

Spring 2020

- Led graduate seminar and practicum on editing a journal devoted to New Media and Electronic Literature
- Taught Introductory Web Programming (HTML/CSS)

TA ENGL 2744 Creative Writing

Spring 2020

 Led lectures, discussions and provided individual feedback as part of course on CNF, poetry, fiction, and playwriting

Instructor ENGL 1105: Intro to Composition (Online/In Person) Fall 2019, 2020

- Wrote lesson plans, created syllabus, lectured, led discussions, and gave feedback to 20 students from a variety of cultural and disciplinary backgrounds
- Created course website
- Taught students basic website creation to deploy as part of course project

TA ENGL 4684 Afrofuturism: To Vibranium and Beyond

Spring 2019

- Co-Directed interactive audio visual installation based on student mixtapes in the Cube at Moss Art Center, a 360 spatial audio performance center
- Co-Directed installation in Newman Library on imagined future devices that could provide social impact
- Led discussions and taught classes on creative process

CONFERENCES Creativity & Cognition 2022, Venice, IT.

Spring 2022

 Accepted to present paper "Watch Me Write: Revealing Creative Pro- cess with Writing Replay"

CHI 2022, New Orleans, LA.

Spring 2022

- Attended world's largest Human-Computer Interaction conference as a member of the ACM
- Accepted to and participated in workshop "There's no Justice, Just Us" with paper Roadmap to Abolition: A Counter-mapping Project to Advance Understanding of the Theory and Practice of Abolition

Absolutely Interdisciplinary (AI), Virtual, University of Toronto.

Spring 2021

• Attended interdisciplinary conference exploring artificial intelligence through cognitive science, complexity theory, ethics, and social choice theory

Feminist Futures Hackathon, Virtual, MIT Media Lab.

Spring 2021

- Selected (acceptance rate 10%) to attend month long hackathon to address Environmental Justice, Motherhood, and Prison and Police Abolitionism
- Started *Roadmap to Abolition* digital map project with collaborator at Media Lab to connect activists and educate the public about community alternatives to prison and policing in the Boston area. Project ongoing

Immersive Stories Workshop, Virtual, Virginia Tech.

Spring 2021

 Attended workshop exploring new possibilities of AR and VR for storytelling and fostering empathy

CHI 2021, ACM Human Factors in Computing Systems, Virtual. Spring 2021

Attended largest Human-Computer Interaction conference virtually as a member of the ACM

Creativity and Cognition Conference, Virtual.

Spring 2021

• Peer reviewer for creativity and cognition conference

 $33rd\ ACM\ Symposium\ on\ User\ Interface\ Software\ and\ Technology,\ Virtual.\ Summer\ 2020$

 Attended UIST Conference and spoke with other researchers working with user interfaces

Intrepid: The Exploratory Word Processor, Computers and Writing Conference, Lansing, Michigan.

Summer 2019

- Constructed *Intrepid*, dynamic word processor which encourages students to write uninhibited through experimental features: hiding all text except for the current word being typed, text-to-speech in the process of writing...
- Presented application within academic research context

Intrepid: The Exploratory Word Processor, Blue Ridge Corridors Conference, Blacksburg, VA.

Fall 2019

- Presented survey of student users of *Intrepid*
- Intrepid was incorporated into Pakistani English classrooms following this presentation

OTHER PUBLICATIONS

Fiction

- 1. Carrera, Dashiel "The Deer: A Novel", Dalkey Archive Press, McLean, Illinois, August 2022 (forthcoming).
- 2. Carrera, Dashiel Excerpt from "The Deer: Side B", 3:AM Magazine, July 2022 (forthcoming).
- 3. Carrera, Dashiel Excerpt from "The Deer: Side B", FENCE, August 2022 (forthcoming).
- 4. Carrera, Dashiel Excerpt from "The Deer", Literary Hub, August 2022 (forthcoming).

New Media

 Carrera, Dashiel "The Deer: New Media Adaptation" In The New River: A Journal of Digital Art and Literature, Blacksburg, VA, 2019.

Non Fiction

- 6. Carrera, Dashiel "The Water Vanishes: Alexandra Kleeman on Something New Under the Sun," In Los Angeles Review of Books, Los Angeles, CA, 2021.
- 7. Carrera, Dashiel "Art and Futility: A Review of Juan Cardenas's *Ornamental*, Translated by Lizzie Davis" In Los Angeles Review of Books, Los Angeles, CA, 2020.
- 8. Carrera, Dashiel "Against the Grain: John O'Brien on the Possible Dalkey Archive/Open Letter Merger" In Los Angeles Review of Books, Los Angeles, CA, 2020.
- 9. Carrera, Dashiel Vipers, Robots, and Cheese Casseroles: Matthew Vollmer on *Permanent Exhibit*, In Los Angeles Review of Books, Los Angeles, CA, 2018.
- 10. Carrera, Dashiel When the Foam Settles: Essentialism in Tech, In The College Hill Independent, Providence, RI, 2015.
- 11. Carrera, Dashiel The Perfect Bubble: The Polynomial Guide to the Universe, In The College Hill Independent, Providence, RI, 2015.

Music

- 12. Carrera, Dashiel, "Simple EP", 75OrLessRecords, Providence, RI, 2021.
- Carrera, Dashiel, "Plastic Astronauts LP", 75OrLessRecords, Providence, RI, 2018.
- Carrera, Dashiel, "Plastic Astronauts EP", 75OrLessRecords, Providence, RI, 2017.
- 15. Carrera, Dashiel, Harris, Evan, "Graduation Sensation", 75OrLessRecords, Providence, RI, 2017.
- 16. Carrera, Dashiel, Johnson, Hariz, Harris, Evan, "Coffee with the Feng Shui Police EP", 75OrLessRecords, Providence, RI, 2015.
- 17. Carrera, Dashiel, Johnson, Hariz, Harris, Evan, "Thank You EP", 75OrLess-Records, Providence, RI, 2015.

Performances

1. Death of a Poem: Live Writing Audiovisual Performance, Electronic Literature Organization, University of Central Florida, Orlando, Florida, Summer 2020 (Cancelled for pandemic).

Performance in which poem is composed live in front of an audience with dynamic temporal typography and sound effects.

2. The Deer: New Media Adaptation, Electronic Literature Organization, University College Cork, Cork, Ireland, Summer 2019.

Performed audio-visual adaptation of my novel *The Deer*, later published by Dalkey Archive Press.

3. Sound of Space: An Interactive Afrofuturist Experience, The Cube, Blacksburg, VA, Spring 2019.

Co-directed interactive installation with Afrofuturist mixtapes and cyclorama projection in a 360 surround sound theater.

- 4. Dashiel Carrera solo performance, Firehouse 13, Providence, RI, Fall 2016. Performed solo set for 75OrLessRecords benefit gig.
- 5. Various Rock Performances, (The Met, AS220, O'Brien's, The Parlour, News Cafe...), New England, 2014-2016.

Performed over 30 paid performances with my punk band Feng Shui Police.

- 6. *Practice*, Grant Recital Hall, Brown University, Providence, RI, Spring 2016.

 Performed improvised monologue with quadrophonic sound effects and sample overlays.
- 7. The Sabateur, Grant Recital Hall, Brown University, Providence, RI, Spring 2016.

Performed invented instruments made with Leap Motion, guitar, piano, and OSC connected iPads.

- 8. Bug Music, Grant Recital Hall, Brown University, Providence, RI, Fall 2014. Performed music with automated toy bugs and contact mics.
- Hex on Math, Grant Recital Hall, Brown University, Providence, RI, Fall 2014.
 Performed invented instrument made from circuit bent Speak and Math toy.

Installations

- 1. Zoología Fantastica in the Mist, Moss Art Center, Blacksburg, VA, Spring 2020.

 Interactive 3D storytelling adaptation of Jorge Luis Borges's compilation of international fairy tales. (Three.js, Logic, Abelton)
- 2. Light Waterfall, Brown University, Providence, RI, Spring 2014.

 Guerrilla install of a light waterfall that generates custom patterns based on swipe of student IDs.

3. *Moon Printer*, Granoff Center for the Arts, Brown University, Providence, RI, Spring 2014.

Receipt printer that printed a stream of the current moon phase every day for a month.

Talks

1. Watch Me Write: Revealing Creative Process with Writing Replay", Venice, IT, Spring 2022.

Gave talk about writing replay paper at Creativity & Cognition Conference.

2. In 2 Writing Workshop: The First Workshop on Intelligent and Interactive Writing Assistants, Dublin, IE, Spring 2022.

Invited panelist about the future of writing fiction with AI-assisted writing.

3. The Power of Immersive Stories, Blacksburg, VA, Spring 2021.

Presented immersive 3D immersive retelling of Jorge Luis Borges story "Zoologa Fantastica in the Mist" at Immersive Stories workshop at Virginia Tech.

4. Glossolalia Festival, Blacksburg, VA, Spring 2021.

Reading at literary festival, both poetry and fiction. Competitive acceptance.

5. Introducing Richard Chiem , Blacksburg, VA, Fall 2020.

Introduced Richard Chiem for Virtual Reading.

6. MFAngle Podcast, Blacksburg, VA, Fall 2019.

Gave interview about navigating artistic process inside and outside of an MFA program.

OUTREACH

Summit ACT Prep Class for 1st Generation College Students

Spring 2018

• Taught free ACT Preparatory class for 1st generation college students

MFAngle Podcast Audio Engineer

Fall 2019

- Made jingle and served as audio engineer/editor for podcast that helps people of color navigate the creative writing MFA world
- Available on Apple Podcasts and Google Play

PRESS

- 1. Review of The Deer, Publisher's Weekly, June 2022.
- 2. Deep Vellum to Relaunch Dalkey Archive in April 2022, Publisher's Weekly, November 2021.
- 3. Deep Vellum will relaunch the Dalkey Archive this April, LitHub, November 2021.

- 4. Weirdos in a Band Drinking Coffee, Providence Monthly, December 2015.
- 5. Song Premiere: Providence's Feng Shui Police burst with youthful energy on 'Try', Vanyaland, September 2015.
- 6. EP Grab Bag Vol. 93, SpaceRockMountain, March 2015.