

RYAN LOUIE

CONTACT INFORMATION Northwestern University (949) 562-1620
Dept. of Computer Science and Communications ryanlouie@u.northwestern.edu
Delta Lab <http://youralien.github.io>

EDUCATION **Northwestern University**, Evanston, IL Sep 2017 - Jun 2022 (expected)
Pursuing Ph.D. in **Technology Social Behavior**
Advisor: *Haoqi Zhang*

Olin College of Engineering, Needham, MA
B.S., Engineering, Robotics, May 2017

PROFESSIONAL EXPERIENCE **Google Brain, Magenta** Mountain View, CA Jun - Sep 2021
Research Intern; hosted by [Jesse Engel](#)
Google Brain, People AI Research Mountain View, CA Jun - Sep 2019
Research Intern; hosted by [Carrie J Cai](#)
Delta Lab, Northwestern University, Evanston, IL Sep 2017 - Now
Graduate Student Researcher
Olin College Crowdsourcing and Machine Learning Lab, Needham, MA Jun - Aug 2017
Research Assistant; advised by [Paul Ruvolo](#)
Uber ATC, Pittsburgh, PA May - Aug 2016
Software Engineer Intern
Indico Enterprise AI, Boston, MA Jun - Aug 2015
Machine Learning Research Development Intern
DuPont Pioneer, Boston, MA May - Aug 2014
Data Science Intern

SELECTED PUBLICATIONS **Ryan Louie**, Darren Gergle, Haoqi Zhang. **Affinder: Expressing Concepts of Situations that Afford Activities using Context-Detectors**. In *Proceedings of ACM CHI Conference on Human Factors in Computing Systems (CHI 2022)*, 2022.

Ryan Louie, Jesse Engel, Anna Huang. **Expressive Communication: Evaluating Developments in Generative Models and Steering Interfaces for Music Creation**. In *Proceedings of International Conference on Intelligent User Interfaces (IUI 2022)*, 2022.

Nina Cong, Kevin Cheng, Haoqi Zhang, **Ryan Louie**. **Collective Narrative: Scaffolding Community Storytelling through Context-Awareness**. In *Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing (CSCW'21 Companion)*, 2021.

Ryan Louie, Kapil Garg, Jennie Werner, Allison Sun, Darren Gergle, Haoqi Zhang. **Opportunistic Collective Experiences: Identifying Shared Situations and Structuring Shared Activities at Distance.** In *Proceedings of ACM Human-Computer Interaction (CSCW 2020)*, 2020.

Ryan Louie, Andy Coenen, Cheng Zhi Huang, Michael Terry, Carrie J Cai. **Novice-AI Music Co-Creation via AI-Steering Tools for Deep Generative Models.** In *Proceedings of ACM CHI Conference on Human Factors in Computing Systems (CHI 2020)*, 2020.

Chris Yoon, **Ryan Louie**, Jeremy Ryan, MinhKhang Vu, Hyegi Bang, William Derksen, Paul Ruvolo. **Leveraging Augmented Reality to Create Apps for People with Visual Disabilities: A Case Study in Indoor Navigation.** In *The 21st International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS 2019)*, 2019. **Best Artifact Award.**

MENTORED PUBLICATIONS

Cindy Hu. **Self-Disclosure for Early Relationship Development through Situated Prompts in Opportunistic Collective Experiences.** In *Extended Abstracts of the ACM CHI Conference on Human Factors in Computing Systems (CHI 2022)*, 2022. **2nd Place in Undergraduate Student Research Competition.**

Gabriel Caniglia. **Cast: A Context-Aware Collaborative Storytelling Platform.** In *Extended Abstracts of the ACM CHI Conference on Human Factors in Computing Systems (CHI 2020)*, 2020.

Jennie Werner, Allison Sun. **Cerebro: A Platform for Opportunistic Collective Experiences.** In *Extended Abstracts ACM CHI Conference on Human Factors in Computing Systems (CHI 2018)*, 2018. **2nd Place in Undergraduate Student Research Competition.**

AWARDS & HONORS

Design Research Fellow, Segal Design Research Cluster at Northwestern, Funding support from 2018 - 2019.

Honorable Mention, NSF Graduate Research Fellowship, 2017.

Grand Challenges Scholar, National Academy of Engineering Grand Challenges Scholars Program, 2017.

Olin Merit Scholarship, Half Tuition, Funding support from 2013 - 2017.

PRESENTATIONS

Opportunistic Collective Experiences: Identifying Shared Situations and Structuring Shared Activities at Distance. In CSCW 2020 conference session on Coordination and Collaboration. October 2020. [Talk](#).

Novice-AI Music Co-Creation via AI-Steering Tools for Deep Generative Models. In CHI 2020 conference session on Sound and Musical Experiences. May 2020. [Talk](#). [Session Info](#).

Cococo: AI-Steering Tools for Music Novices Co-Creating with Generative Models.

In IUI 2020 workshop on Human-AI Co-Creation with Generative Models. April 2020. [Slides](#). [Workshop Info](#).

PATENTS / PRIOR
ART

Ryan Louie, Nicole Rifkin, Brandon Rohrer. "[Method for quantifying crop health using overhead imagery](#)." *The IP.com Prior Art Database*, DuPont Pioneer, 2015.

TEACHING
EXPERIENCE

Northwestern University, Evanston, IL USA

- *Project Mentor*, CS315 Design Technology Research Fall 2017 - Now
- *TA*, CS314/COMM351 Technology Human Interaction Winter 2021

Olin College of Engineering, Needham, MA USA

- *Teaching Assistant*, ENGR3590 Computational Robotics Spring 2017
- *Teaching Assistant*, ENGR/MTH2199C Data Science Spring 2015
- *Teaching Assistant*, MTH2220 Linearity II Fall 2014
- *Teaching Assistant*, MTH2210 Linearity I Spring 2014