Brennan Jones

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Human-Computer Interaction (HCI) researcher with experience working on technologies for communication, human-AI interaction, extended reality (XR), and developer tools. Skilled in running user studies, conducting foundational research, and building prototypes. Trained as a researcher, designer, developer, computer scientist, and communicator.

SELECTED EXPERIENCE

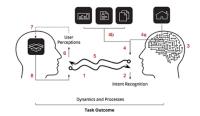
Postdoctoral Researcher & Course Instructor, University of Toronto

- Conducting research on human-Al communication, social/conversational agents, XR interactions, Al-supported decision making, and long-term human-Al partnerships.
- Co-mentoring students and co-leading research in the group.
- Teaching a graduate-level user-experience (UX) course on technologies for human-human and human-agent communication.
- Collaborating with researchers at NAVER AI Lab, Hong Kong University of Science and Technology (HKUST) Guangzhou, and Xi'an Jiaotong-Liverpool University (XJTLU).

Research Fellow (Volunteer; Part-time), Almpower.org

- Worked on research to study the needs and experiences of individuals who stutter when using video conferencing.
- Helped with **co-designing and developing** video conferencing interfaces that are inclusive of individuals with communication difficulties such as stuttering.
- Helped develop a Zoom app to support inclusive meetings with individuals who stutter, using React.js (on the client side) and Node.js (on the server side). Codesigned a longitudinal study to understand the usage, perceptions, and impacts of this Zoom extension, both by individuals with communication difficulties and their peers.

2024.5 - present



2024.4 - 2024.8



Postdoctoral (Visiting) Researcher, Human-Al Interaction for AR, Reality Labs Research (RL-R), Meta

2022.4 - 2024.3

- Worked on an R&D team to design, prototype, and study novel interfaces for context-aware human-AI interaction on smart glasses and AR.
- **Designed and built a prototype** of a conversational AI agent and **ran a one-month field study** to understand the user value and users' needs from conversational agents running on smart glasses.
- Helped analyze data from a large-scale three-month diary study with several hundred participants, helped synthesize the results into a framework to inform the design of context-aware AI systems for smart glasses.
- Co-ran a multi-stage online interview study to derive further design recommendations for AI agents on smart glasses.
- Collaborated with AI and machine learning (ML) engineers to design data-collection efforts for training ML models, including a campaign for collecting egocentric video as part of Project Aria (https://www.projectaria.com/).
- Collaborated with designers to help translate research findings into design decisions. Collaborated with engineers and designers in hackathons to help them explore new system prototype and design ideas.
- Conducted research using methods such as surveys, interviews, and research through design.
- Mentored two research interns and five research assistants.
- Prepared two patent applications for novel interface designs, published three academic papers (with another under review).

UX Researcher III, Stadia and Immersive Stream, Google (Contractor via Adecco)

2021.11 - 2022.3

- Worked on UX research to build and improve **tools used by developers and publishers** to develop and port their games to the Stadia and Immersive Stream cloud-gaming platforms.
- Collaborated with partners in design and engineering to determine relevant research questions and business needs.
- **Co-ran a large survey study** to understand developer and publisher satisfaction levels with Stadia's developer and publisher tools.
- Co-designed a remote user study to evaluate one of Stadia's new tools used to test games running in the cloud.



• Co-ran a workshop with partners to help them translate the research findings from several studies into business decisions and next steps.

JEM Research Intern, Microsoft Research (MSR) Redmond

• Worked on research exploring how to utilize **spatial audio to improve hybrid video conferencing in meeting rooms**, in collaboration with the **Microsoft Teams** team.

- **Designed**, **prototyped**, and **evaluated** (via a lab study) different spatial audio configurations for the placements of remote users' voices in Teams meeting rooms (using different mono, stereo, and surround-sound audio layouts).
- This work led to spatial audio being **integrated into the Teams Rooms product**: https://tinyurl.com/teams-spatial-audio

Mono Stereo Binary Augmented Multichannel Loudspeakers Side listening position

2019.7 - 2019.9

Research Intern, Microsoft Research (MSR) Cambridge

- Built a two-way XR robotic telepresence research prototype called "VROOM" (Virtual Robot Overlay for Online Meetings), to support remote collaboration activities in an open office environment.
- Ran a **mixed-methods exploratory lab study** to understand how users use this prototype to collaborate in an open-office environment.

Visiting Ph.D. Scholar, Connections Lab (cLab), Simon Fraser University

- Worked on research related to video communication, social computing, remote collaboration, and telepresence.
- Conducted lab experiments and field studies to evaluate novel video-communication interfaces.
- Co-ran a **contextual-interview study** to understand the needs of 911 call takers and dispatchers from video-calling interfaces.
- Mentored junior researchers, including interns, undergraduate, and junior graduate students.

2017.4 - 2021.6

2021.6 - 2021.10



Undergraduate and Graduate Student Researcher, Interactions Lab (iLab), University of Calgary

2012.11 - 2021.6

- Worked on research related to video communication, remote collaboration, and telepresence.
- **Designed**, **implemented**, and **evaluated** research prototypes.
- Conducted experiments and foundational studies using quantitative, qualitative, and mixed research methods.



EDUCATION

Ph.D. in Computer Science (HCI), University of Calgary, Canada (GPA: 4.00/4.00)

2017.4 - 2021.6

Supervisory Committee: Dr. Anthony Tang (University of Toronto), Dr. Carman Neustaedter (Simon Fraser University), Dr. Ehud Sharlin, Dr. Wesley Willett; **Thesis**: Designing Remote Collaboration Technologies for Wilderness Search and Rescue

M.Sc. in Computer Science (HCI), University of Calgary, Canada (GPA: 3.85/4.00)

2014.9 - 2016.12

Thesis Advisor: Dr. Anthony Tang; **Thesis:** Elevating Communication, Collaboration, and Shared Experiences between Peers in Mobile Video Communication using Drones

B.Sc. in Computer Science (with First-Class Honours), University of Calgary, Canada (GPA: 3.75/4.00) 2011.9 – 2014.4 Concentration: Human-Computer Interaction; Courses: HCI, HRI, Computer Graphics, Software Engineering; Extracurricular Activities: RezNet, UCalgaryCares; Honours Thesis: Improving Collaboration in Online Group Art Therapy

SELECTED SKILLS AND QUALIFICATIONS

HCI Research:

Lab Experiments, Field Studies, Observation Studies, Interview Studies, Workshops, Survey Research, Contextual Inquiry, Ethnographic Methods, Qualitative Methods, Quantitative Methods, Mixed Methods

Domain-Specific Topics:

Large Language Models (LLMs), Generative AI, Conversational User Interfaces, Human-AI Interaction, AR/VR/XR *Programming languages, tools, platforms, and environments:*

JavaScript, React, Node.js, Python, LangChain, C#, .NET, Visual Studio, Swift, Objective-C, PHP, MySQL, HTML5, CSS, Java, C, C++