Brennan Jones

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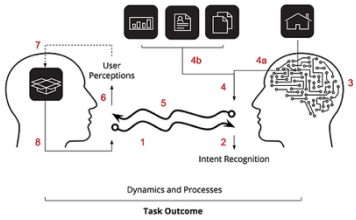
Human-Computer Interaction (HCI) researcher with experience working on technologies for human-AI interaction, distributed work, video conferencing, extended reality (XR), and developer tools. Skilled in running user studies, conducting foundational research, and building prototypes. Trained as a researcher,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

SELECTED EXPERIENCE

Postdoctoral Fellow & Sessional Instructor, *Faculty of Information (iSchool)*, *University of Toronto* **2024.5 – present**



- Conducting research on **human-AI interaction**, **AI-supported decision making**, **AI-assisted team collaboration**, **social/conversational agents**, and **XR interfaces**.
- **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)**.

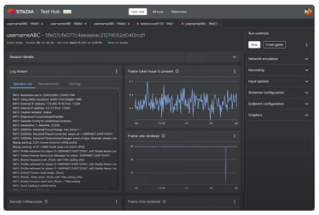
Research Fellow (Volunteer; Part-time), *AImpower.org* **2024.4 – present**

- Working on research to **study the needs and experiences of individuals who stutter** when using video conferencing.
- **Co-designing, developing, and user testing** video conferencing interfaces that are inclusive of those with communication difficulties such as stuttering.
- **Developing 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). **Preparing a longitudinal study** to understand the usage, perceptions, and impacts of this Zoom extension, both by individuals with communication difficulties and their peers.
- **Collaborating with and co-advising a student group** from Cornell University to design an interface for post-meeting reflection and discussion.

Postdoctoral (Visiting) Researcher, Human-AI 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 and **published three academic papers**.

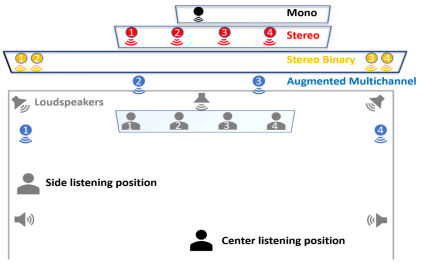
UX Researcher III, *Stadia and Immersive Stream, Google (Contractor via Adecco)* **2021.11 – 2022.3**



- 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* **2021.6 – 2021.10**



- 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

Research Intern, *Microsoft Research (MSR) Cambridge* **2019.7 – 2019.9**

- 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* **2017.4 – 2021.6**

- 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.

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++