

Bofan Yu

Research Interests

My research in Human-Computer Interaction (HCI) focuses on bridging physical sensing and AI-based intention modeling to support intention-aware interaction in the physical world. I design sensor-powered systems, such as smart vehicle cabins and smart home environments, to study how people interact with sensing technologies. In parallel, I explore how AI systems can interpret and model human intentions from behavioral cues. Through this work, I aim to narrow the gap between machine perception and human intention representation, enabling interactive systems that can better understand and support people in the physical world.

Education

- 2025 – 2026 **Simon Fraser University, Burnaby, BC**
M.S. in Computer Science
Advisor: Prof. Xing-Dong Yang
GPA: 4.13/4.33
- 2020 – 2024 **Simon Fraser University, Burnaby, BC**
B.S. in Computer Science

Publications

Refereed Conference Papers

- C.1 **Bofan Yu**, Borui Li, Tingyu Zhang, and Xing-Dong Yang. 2026. Understanding User Requirements for Creating Sensor-Powered Smart Car Cabins Through Retrofitting. In *Proceedings of the 2026 CHI Conference on Human Factors in Computing Systems (CHI '26)*.
- C.2 Borui Li, **Bofan Yu**, and Xing-Dong Yang. 2026. Privacy Perceptions in Sensor-Powered Smart Vehicle Cabins. In *Proceedings of Graphics Interface 2026 (GI '26)*. (In Press)
- C.3 Yuning Su, **Bofan Yu**, Tingyu Zhang, Yonghao Shi, Te-Yen Wu, and Xing-Dong Yang. 2026. Development and Evaluation of Sensor-Powered Wireless Smart Wooden Panels. In *Proceedings of Graphics Interface 2026 (GI '26)*. (In Press)
- C.4 **Bofan Yu**, Anjun Zhu, and Xing-Dong Yang. 2026. Agent Intent Modeling for Artificial Societies. In *Proceedings of the 2026 ACM Symposium on User Interface Software and Technology (UIST '26)*. (In Submission)
- C.5 Vania Peng, **Bofan Yu**, and Xing-Dong Yang. 2026. BigTalk Agent: Scaffolding Social Conditions for Equitable Group Small Talk Through Dual-Line AI Coaching. In *Proceedings of the 2026 ACM Symposium on User Interface Software and Technology (UIST '26)*. (In Submission)

- C.6 Jinda Yang, Borui Li, **Bofan Yu**, and Xing-Dong Yang. 2026. PriviWindow: Beyond Occlusion for Selective Privacy in Windows. In *Proceedings of the 2026 ACM Symposium on User Interface Software and Technology (UIST '26)*. (In Submission)

Awards and Fellowships

- 2026 **Professional Development Grant**, Simon Fraser University (\$500)
2026 **Computing Science Travel Award**, Simon Fraser University (\$1,000)
2025 – 2026 **Graduate Fellowship**, Simon Fraser University (\$48,000 over two years)
2021 – 2026 **Bursaries**, Simon Fraser University (\$30,000+)

Employment

- 2023 **Vaisala Canada Inc.**, *Vancouver, BC*
Software Developer Intern
2022 **Whaler Technologies Inc.**, *Vancouver, BC*
Software Developer Intern

Teaching Experience

- Spring 2026 **Teaching Assistant**
CMPT 120: Introduction to Computing Science and Programming I, *Simon Fraser University*
Fall 2025 **Teaching Assistant**
CMPT 354: Database Systems, *Simon Fraser University*
Summer 2025 **Teaching Assistant**
CMPT 263: Human-Centered Computing, *Simon Fraser University*
Spring 2025 **Teaching Assistant**
CMPT 125: Introduction to Computing Science and Programming II, *Simon Fraser University*