January 21

# Mohi Reza

www.mohireza.com | www.linkedin.com/in/mohireza

## Research Focus

My overarching research interests span across *human-computer interaction (HCI), education technology*, and *psychology of learning*. I design and run experiments involving A/B comparisons to investigate ways to personalize the learning experience of individuals in scalable real-world online learning environments.

## Education

**University of Toronto |** (Toronto ON, Canada | September 2020 – Present)
Ph.D., Computer Science, Human-Computer Interaction

**University of British Columbia |** (Vancouver BC, Canada | September 2018 – August 2020)
M.Sc., Computer Science, Human-Computer Interaction

- *Average: 90.2%*

**BRAC University** | (Dhaka, Bangladesh | January 2014 – December 2017)
B.Sc., Computer Science, Economics Double Major

- *Cumulative GPA: 3.93/4.0, graduated with highest distinction*
- *Ranked 1st in CS program, class of 2017-18*

## Employment

**Graduate Research Assistant |** (Toronto ON, Canada | September 2020 – Present)
University of Toronto, Department of Computer Science

- *Specialization: Human-Computer-Interaction, Education Technology*
- *Dynamic Graphics Project Lab, Advisor: Dr. Joseph Jay Williams*

**Graduate Teaching Assistant |** (Toronto ON, Canada | September 2020 – Present)
Department of Computer Science, University of Toronto

- *CSC 108: Introduction to Computer Programming | (Fall 2020, Winter 2020)*
- *CSC 2514/428: Human-Computer Interaction | (Winter 2020)*

**Graduate Research Assistant |** (Vancouver BC, Canada | May 2019 – Present)
University of British Columbia, Department of Computer Science

- *Specialization: Human-Computer-Interaction, Computer-Assisted Language Learning*
- *Multimodal User Experience Lab, Advisor: Dr. Dongwook Yoon*

**Graduate Teaching Assistant |** (Vancouver BC, Canada | September 2018 – Present)
Department of Computer Science, University of British Columbia

- ***Lead TA**: CPSC 121/121V: Models of Computation | (Summer T1 2019)*
- ***TA**: CPSC 121: Models of Computation | (Winter T1 & T2 2018, Winter T1 2019)*

**RichReview Deployment Facilitator** | (Vancouver BC, Canada | August 2019 – Present)
Department of Computer Science, University of British Columbia | richreview.net

- *Managed the deployment of RichReview, a novel document annotation tool, to 3 language classrooms at UBC Asian Studies (KORN 200, CHIN131, CHIN 481).*
- *Worked closely with three language instructors and a developer to rapidly resolve technical issues with the system.*
- *Conducted in-class demos to introduce RichReview to over 100 students.*

**Programmer (.Net Developer)** (Dhaka, Bangladesh | April 2018 – July 2018)
Enterprise Solutions Department, Southtech Limited | southtechgroup.com

- *Specalized in full-stack web development with C#, MS SQL, ASP.NET MVC and JS*

**Intern** (**.Net Developer)** (Dhaka, Bangladesh, January 2018 – March 2018)
Enterprise Solutions Department, Southtech Limited | southtechgroup.com

- *Built an internal human-resource directory for the company from scratch based on stakeholder requirements.*

**Undergraduate Teaching Assistant** (Student Tutor) **|** (Summer 2016 – Fall 2017)
Department of Computer Science & Engineering, BRAC University

*Undergraduate Courses*

- *CSE230: Discrete Mathematics | (Summer & Fall 16)*
- *CSE161: Introduction to Computer Programming | (Spring, Summer & Fall 17)*

## Publications & Posters

[c.1] Designing CAST: A Computer-Assisted Shadowing Trainer for Self-Regulated Foreign Language Listening Practice
**Mohi Reza** and Dongwook Yoon | CHI 2021

[c.2] Designers Characterize Naturalness in VUIs: Their Goals, Practices, and Challenges
Yelim Kim, **Mohi Reza**, Joanna McGrenere, and Dongwook Yoon | CHI 2021

[p.1] Guiding Pace and Intonation of Speech in Adult ESL Learners Using Visual Scaffolds in a Pronunciation Training Tool | UBC DFP Design Showcase 2019
**Mohi Reza** and Dongwook Yoon

## Voluntary Service

**Event Co-Chair, DFP Summer School |** (Vancouver, BC, Canada | Summer 2019)
UBC Designing for People Research Cluster | https://dfp.ubc.ca

- Organized a two-day workshop on E-Portfolios in collaboration with event co-chairs Paul Bucci, Anna Offenwanger and Natalya Lebedeva.

**Meeting Coordinator, IEEE Student Activities Committee Member |** (Asia Pacific, 2018)
IEEE Region 10, Asia Pacific | sac.ieeer10.org

- Served as a liaison between the R10 SAC advisor, professor Rajesh Ingle, and fellow committee members.
- Organized and hosted weekly meetings and webinars at a sectional level with members across Asia Pacific.

**Content Writer, IEEE Student Activities Committee Member |** (Bangladesh, 2017)
IEEE Bangladesh Section (BDS) | sites.ieee.org/bangladesh-sac/

- Developed IEEE Bangladesh Section's first successful IEEE Foundation grant application titled "Demystifying Nuclear Power Technology". *IEEE BDS was awarded $10,000 by IEEE Foundation in 2017 as a result of that application.*
- Served as Project Lead for IEEE BDS Anticlockwise,
- Served as Content Team Lead, IEEE BDS SYW Congress 2017.

**Chairperson | (**Bangladesh, 2017)
IEEE BRAC University Student Branch | ieeebracu.com

- Lead a team of 5 student branch officers to manage a student body of 70+ IEEE Members.
- Oversaw the administration of all student branch activities and student affairs.

## Academic Honors

- **Vice Chancellor's Gold Medal, BRAC University 13th Convocation 2019**
  *Awarded for Ranking 1st in CS Program, Class of 2017-18*
- **UBC International Tuition Award** (2018-2019)
  *Awarded to international grad students in recognition of academic achievements*
- **BRAC University Vice Chancellor's List** (9 Semesters)
  *Awarded for achieving a GPA of 3.9 - 4.0 in a particular semester.*
- **BRAC University Dean's List** (2 Semesters)
  *Awarded for achieving a GPA of 3.7 – 3.89 in a particular semester.*
- **BRAC University Performance Based Scholarships** (7 Semesters)
  *10-50% tuition waivers awarded for maintaining a high cumulative CGPA*
- **Daily Star Award for Academic Excellence** (2011 | 2013)
  *For good GCE and IGCSE performance*

## Projects

### Using Visual Scaffolds in a Language Learning Tool as guides for Pacing and Intonation

(Winter Term 2, CPSC 554Y Solo Project, University of British Columbia)

Intonation and pace are important prosodic features that are challenging for non-native students to master on their own. There exists no good visual design to guide the student's narration of a given passage, since phonological encoding of plain text is inherently ambiguous (e.g., OB-ject vs. ob-JECT). To solve this problem, I built and evaluated a system that augments plain text with four different visual scaffolds that serve as guides for pacing and intonation.

### WeatherBug Voice: Rethinking Weather Information Communications

(Winter Term 2, CPSC 554K Project, University of British Columbia)

We collaborated with WeatherBug, a leading weather information company, to tackle the problem of *error-handling* in weather VUIs. We identified several error-handling strategies from the literature and implemented them in our VUI prototyping tool. The tool also facilitated a Wizard of Oz user study, in which we tested our error handling strategies against the ones currently used in the WeatherBug Alexa app. We conducted a user study and evaluated the four strategies (rapid re-prompt; detail escalation; context awareness; and grunt mode).

*Collaborators: Anna Offenwanger, Nicholas Hetherington*

### Marvin Meeting: Bringing richness of one-on-one office hours to remote meetings

(Winter Term 1, CPSC 544 Project, University of British Columbia)

Marvin Meetings is a telecommunication tool that allows for synchronous handwriting and drawing on a shared surface. This emulates the experience of writing on a white-board or a shared piece of paper and enables teachers and students to quickly build common ground, much like they do in real one-on-one meetings. We built and evaluated a prototype for this idea using the 5 stages of the Design Thinking process.

*Collaborators: Anna Offenwanger, Nicholas Hetherington, Siyuan He*

### Was That Sarcasm? -- A Survey of Machine Learning Models for Classifying Sarcastic Comments on Reddit Using Word Embeddings

(Winter Term 1, CPSC 532M Project, University of British Columbia)

We explored the use of word embedding models to represent various Reddit comments as high-dimensional vectors and applied these vectors as inputs to a collection of classification models to classify comments as either being sarcastic or not. Further, we compared the performance of word embedding models to traditional text-classification techniques using a bag-of-n-grams representation.

*Collaborator: Kyle Clarkson*

## Technical Skillset

- Programming: Java, Python, C#, JavaScript
- Web Development: HTML5, CSS3, ASP.NET MVC 5
- Database: MySQL, MS SQL