

## Mohsena Ashraf



*Mohsena Ashraf is a second year PhD student at CU Boulder working with Dr. Tom Yeh at the Center for the Brain, A.I., and Child (BAIC). Her research focuses on chatbots, neuroimaging, and human-AI interaction, especially in regards to young children. Mohsena's compassion for others shines through in both her professional and personal life; if you see her around campus, stop and say hi!*

### **What was your path to CU Boulder?**

Mohsena earned her undergraduate degree in Computer Science in her home country of Bangladesh from the Ahsanullah University of Science and Technology. She has always had a natural interest in teaching, and during her undergraduate studies, private tutoring high school students. After graduating, she joined her university as a junior lecturer, where she had the opportunity to work with students on multiple research projects, an experience she found very rewarding. This teaching experience helped her realize her passion for education and conducting research with global impact. To further pursue her interests, she reached out to Dr. Tom Yeh to discuss her research interests and soon realized that he was the ideal mentor to work with.

### **How would you describe your research to others?**

Mohsena is currently involved in a project that evaluates chatbots like ChatGPT by measuring participants' prefrontal cortex activation using functional near-infrared spectroscopy (fNIRS), a portable, non-invasive form of neuroimaging. This project has two main components. The first one focuses on how well ChatGPT can support young and first-time parents, evaluating it on tasks like explaining how to change a diaper or recommending products for maternity leave. The other explores how ChatGPT can assist children with story creation. She is comparing participant enjoyment and fNIRS data from three protocols: children creating stories with ChatGPT, children creating stories with their parents, and children and parents working together to create a story with ChatGPT.

### **If not in academia, what other career path would you have chosen?**

*"Maybe, I would have been an astronomer or an astronaut ... when I was in high school, I liked seeing the stars and also knowing about the constellations. I also participated in multiple Astro Olympiads and I enjoyed it."*

### **Who is someone who helped you in your career path?**

Mohsena is deeply appreciative of the support and guidance she has received throughout her career journey. To express her gratitude, she would like to acknowledge the significant influence of a few individuals. First and foremost, her younger sister has been an unwavering source of inspiration and encouragement. Additionally, she owes a debt of gratitude to her graphics teacher during her undergraduate studies, who imparted valuable lessons on effective communication and teaching. Furthermore, in her professional life, she holds her supervisor in high regard for the invaluable mentorship and guidance provided.

### **What are three facts that people won't be able to guess about you?**

Mohsena's life holds a few intriguing facts that may not be immediately apparent. She takes pride in being the first in her family to pursue higher education, a journey she continues to this day. Surprisingly, she hasn't yet mastered the art of swimming or riding a bicycle, emphasizing that learning is an ongoing process. In a more creative sphere, she once operated a home-based cooking business in her native country and maintains a popular cooking YouTube channel, showcasing her culinary talents and passion for the culinary arts. She also creates educational videos in her native language, Bengali!

Cooking Channel: <https://www.youtube.com/c/RiasCookbook>

Educational Channel: <https://www.youtube.com/c/MohsenaAshraf>

### **What are some of your favorite activities to do in Fall?**

The autumn season holds a special place in Mohsena's heart, and she revels in the splendid display of fall colors. She finds immense joy in immersing herself in the beauty of nature during this season and enjoys visiting places where the fall foliage is at its most enchanting. What sets her apart is her philosophy of living in the moment, opting to savor the experiences rather than capturing them through a camera lens, which she believes enhances her connection with the world around her.

### **What advice would you share with people?**

Mohsena shares this piece of advice: "Be good to your neighbors. We should be empathetic and friendly towards them to build a strong community."