JESSY CEHA · CV

CONTACT jceha@uwaterloo.ca INFORMATION +15195806977

http://jessyceha.com

CITIZENSHIP LANGUAGES Canadian, Dutch English, Dutch

EDUCATION

University of Waterloo, Waterloo, ON, Canada

Ph.D. in Computer Science: Human-Computer Interaction, Sept. 2017 - present

Advisor: Dr. Edith Law (School of Computer Science)

Thesis Proposal: How Discourse Moves by Pedagogical Conversational Agents Can Provide

Social Scaffolding to Students

Key Courses: Experimental Design, Empirical Software Evolution, Human-AI Interac-

tion, Experimental Methods in HCI

University of Groningen, Groningen, the Netherlands

M.Sc. in Human-Machine Communication, cum laude, 2014 - 2016

Advisor: Dr. Marieke van Vugt (Institute of AI & Cognitive Engineering)

Thesis: Investigation into the Enhancement of Voice Perception:

with simulations of cochlear implants and bimodal hearing

Key Courses: Auditory and Visual Perception, User Models, Cognitive Modeling & Engi-

neering, Neuro-Ergonomics, Computational Discourse, Semantic Web Tech-

nology

Honours Master in High Tech Systems and Materials, 2014 - 2016

A 1.5 year program, followed in addition to the standard Master's, culminating in a research internship at Philips

University of British Columbia, Vancouver, BC, Canada

B.Sc. in Cognitive Systems: Cognition & Brain, with Distinction, 2009 - 2014

Key Courses: Brain Dysfunction and Recovery, Sensory Systems, Memory, Infancy, Cogni-

tive Neuroscience, Intro to HCI Methods, Research and Seminar in Cognitive

Systems, Philosophy of Mind, Intro to SE

HONOURS AND AWARDS Natural Sciences and Engineering Research Council of Canada (NSERC) Postgraduate

Scholarship-Doctoral (PGS D), May 2019

University of Waterloo President's Graduate Scholarship (PGS), May 2019

University of Waterloo Provost Doctoral Entrance Award for Women, Sept. 2017

University of Waterloo Entrance Scholarship, Sept. 2017

Avril McDonald Prize, August 2016

ACADEMIC CONTRIBUTIONS (in preparation) **Ceha, J.**, Law, E., Kulic, D., Oudeyer, P-Y., and Roy, D. Participatory Design for Identifying the Roles of Robots in Learning Activities.

(under review) Henderson, J., **Ceha, J.**, and Lank, E. (2020). Pocket Typing: Mobile Text Entry At Your Side or In Your Pocket for HMDs.

(under review) Law, E., Ravari, B. P., Chhibber, N., Kulic, D., Lin, S., Pantasdo, K. D., Ceha, J., Suh, S., Dillen, N., and Yang, K. (2020). Curiosity Notebook: A Learning-by-Teaching Platform with Conversational Agents.

Ceha, J., Chibberr, N., Goh, J., McDonald, C., Oudeyer, P-Y., Kulic, D., and Law, E. (2019). Expression of Curiosity in Social Robots: Design, Perception, and Effects on Behaviour. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019) May 4-9, 2019, Glasgow, Scotland, UK.* ACM, New York, NY, USA, 12 pages.

Baskent, D., Luckmann, A., Ceha, J., Gaudrain, E., and Tamati, T. N. (2018). The discrimination of voice cues in simulations of bimodal electro-acoustic cochlear-implant hearing. *The Journal of the Acoustical Society of America*, 143(4), pages 292-297.

Ceha, J. M. (2016). Investigation into the Enhancement of Voice Perception: with simulations of cochlear implants and bimodal hearing. (Masters thesis)

Theta-band phase locking after attentional blink training. Ceha, J., Buwalda, T., Taatgen, N., Borst, J., and van Vugt, M. December 2015. Poster presentation at the 15th NVP Winter Conference on Cognition, Brain, and Behaviour. The Netherlands.

SKILLS AND EXPERIENCE

Teaching & Instructional Assistant (University of Waterloo 2017-2018: CS105, 106, 349)

Matlab, Python, HTML, CSS, Processing, OpenViBE, R, Arduino

Lab & Field Studies with adults and children

Voice Assistants (Amazon Alexa)/NAO robot

Eye-Tracking/Pupil Dilation & Cognitive Modelling

Electroencephalography (EEG), Electromyography (EMG) & Brain-Computer Interfaces Product Design & Development (consumer electronics at Philips)

Research

Teachable Agents, Human-Computer Interaction Lab, University of Waterloo, 2017 - present

- Investigating social scaffolding with pedagogical conversational agents with university and elementary school students
- Co-designing educational robot peers with teachers
- Neural correlates of curiosity using EEG

Speech Perception, Dept. of Audiology, University Medical Centre Groningen, 2015 - 2016

- Psychoacoustic experiments with simulations of bimodal cochlear-implant hearing
- Developed an EEG Brain-Computer Interface for improving auditory speech perception in cochlear-implant users

Cognitive Modelling, Institute of AI and Cognitive Engineering, University of Groningen, 2014 - 2016

• EEG study on theta oscillation phase-locking after attentional blink (AB) training

The "eh" Lab, Dept. of Linguistics, University of British Columbia, 2014

• Behavioural study on the syntax of speech acts

VOLUNTEERING

Peer Reviewer for CHI Conference 2019&2020, Nov. 2018&2019 Reviewed 3 manuscripts

Volunteer Educational Assistant, Kitchener, Canada, Feb. - April 2019 Prueter Public School

Shad Canada - a STEAM and entrepreneurship program for students in grade 10 and 11, Waterloo, Canada, July 2018

Led a 3-day workshop on Human-Robot Interaction

GIRLsmarts4tech, Waterloo, Canada, June 2018 Day-long workshops aimed at inspiring girls to explore technology Best Buddies, Waterloo, Canada, Oct. 2017 - May 2018 Weekly volunteering with individuals with developmental or intellectual disabilities

Girls in STEAM event, Waterloo, Canada, Jan. 2018 Role model for elementary & middle school girls

Women in Computer Science (WiCS) Event, Waterloo, Canada, Nov. 2017 Mentor to undergraduate CS students

Learning Buddies Network, Vancouver, Canada, Jan. - April 2014 Elementary school math tutor