JESSY CEHA · CV

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http://jessyceha.com

CITIZENSHIP LANGUAGES Canadian, Dutch English, Dutch

SUMMARY

Highly adaptable and motivated, with research experience in both academia and industry, spanning various areas, countries, and departments. Adept at conducting in-person research in labs, medical centers, and in-the-wild. Knowledge of neuroscience & human-computer interaction methods, human physiology measurement, and behavioural & psychometric testing. Passionate about interdisciplinary research, especially psychology, neuroscience, and computer science.

EDUCATION

Ph.D. Computer Science

2017 - present

University of Waterloo, Waterloo, ON, Canada Specialization: Human-Computer Interaction

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

Thesis Focus: Pedagogical Agents

M.Sc. Human-Machine Communication, cum laude

2014 - 2016

University of Groningen, Groningen, the Netherlands

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

B.Sc. Cognitive Systems, with Distinction

2009 - 2014

University of British Columbia, Vancouver, BC, Canada

Specialization: Cognition & Brain

RESEARCH

Pedagogical Agents

2017 - present

Human-Computer Interaction Lab, University of Waterloo

- Designing pedagogical agents for social scaffolding of learning and affective outcomes
- Investigating neural correlates of curiosity using EEG

Speech Perception

2015 - 2016

Dept. of Audiology, University Medical Centre Groningen

- Psychoacoustic experiments with simulations of bimodal hearing
- Developed an EEG BCI for improving auditory speech perception in cochlearimplant users

Cognitive Modelling

2014 - 2016

Institute of AI and Cognitive Engineering, University of Groningen

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

Linguistics 2014

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

• Behavioural study on the syntax of speech acts

EXPERIENCE

Teaching & Instructional Assistant

2017 - 2018

University of Waterloo

CS105: Introduction to Computer Programming, CS106: Introduction to Computer Science, CS349: User Interfaces

Honours Master in High Tech Systems & Materials (HTSM) University of Groningen

2014 - 2016

A 20-ECTS, 1.5 year program, followed alongside the regular Master's, offered by The University of Groningen in cooperation with Philips and other major industry partners, equips students with the knowledge and skills needed to excel at the frontiers of High Tech Systems and Materials.

Philips Internship (Consumer Electronics)

2015

Sept. 2017

On site at the Philips production center in Drachten, the Netherlands
As part of the HTSM Honours Master: manufactured, tested and finalized a
solution to a technical challenge presented by Philips Consumer Lifestyle.

SKILLS

MATLAB, Python, HTML, CSS, Processing, OpenViBE, R, Arduino, ROS

Lab & Field Studies with adults and children

Voice Assistants (Amazon Alexa) & NAO robot

Eye-Tracking/Pupil Dilation

Product Design & Development (PCB basics; 3D printing)

Electroencephalography (EEG), Electromyography (EMG) & Brain-Computer Interfaces (BCIs)

ACADEMIC CONTRIBUTIONS 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. (2016). Investigation into the Enhancement of Voice Perception: with simulations of cochlear implants and bimodal hearing. (Master's 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.

Honours and Awards Natural Sciences and Engineering Research Council of Canada (NSERC)

Postgraduate Scholarship-Doctoral (PGS D)

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

Avril McDonald Prize August 2016

Volunteering	Peer Reviewer for CHI Conference 2019&2020 Reviewed 3 manuscripts		Nov.	2018&2019
	Student volunteer (SV), Glasgow, Scotland, U.K. SV at the 2019 CHI Conference on Human Factors in Computing Systems			May 2019
	Volunteer Educational Assistant, Kitchener, Canada Prueter Public School]	Feb	April 2019
	Shad Canada, Waterloo, Canada A STEAM and entrepreneurship program for students in grades 10 and 11 — Led a 3-day workshop on Human-Robot Interaction			July 2018
	GIRLsmarts4tech, Waterloo, Canada Day-long workshops aimed at inspiring girls to explore technology			June 2018
	Best Buddies, Waterloo, Canada Weekly volunteering with individuals with developmental or intellectual disabilities	Oct.	2017 -	May 2018
	Girls in STEAM event, Waterloo, Canada Role model for elementary & middle school girls			Jan. 2018

Women in Computer Science (WiCS) Event, Waterloo, Canada

Mentor to undergraduate CS students

Elementary school math tutor

Learning Buddies Network, Vancouver, Canada

Nov. 2017

Jan. - April 2014