JESSY CEHA · CV

CONTACT

jceha@uwaterloo.ca
+1-519-580-6977
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, as well as writing, publishing, and presenting in multiple research areas. 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 (HCI)

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

Specialization: Cognitive Engineering

Advisor: Dr. Marieke van Vugt (Institute of A.I. & 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
HCI Lab, University of Waterloo

Designing pedagogical agents for scaffolding of learning and affective outcomes
Investigating neural correlates of curiosity using electroencephalography (EEG)

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

Psychoacoustic experiments with simulations of bimodal hearing

Dept. of Experimental Psychology, University of Groningen

Developed an EEG BCI for improving auditory speech perception in cochlear-implant users

Cognitive Modelling   2014 - 2016
Institute of A.I. 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

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

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

PCB basics; 3D printing

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

Experience

Teaching

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

Teaching & Instructional Assistant, University of Waterloo — 2017 - 2018
CS105: Introduction to Computer Programming, CS106: Introduction to Computer Science, CS349: User Interfaces

Shad Canada, Waterloo — July 2018
A STEAM and entrepreneurship program for students in grades 10 and 11
Led a 3-day workshop on Human-Robot Interaction

GIRLsmarts4tech, Waterloo — June 2018
Day-long workshops aimed at inspiring and teaching girls to explore technology

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

Product Design & Development

Honours Master in High Tech Systems & Materials, University of Groningen — 2014 - 2016
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.

Philips Internship (Consumer Electronics), Drachten, the Netherlands — 2015
As part of the Honours Master: manufactured, tested and finalized a solution to a technical challenge presented by Philips Consumer Lifestyle.

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) — 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