JESSY CEHA · CV

CONTACT
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CITIZENSHIP
Canadian, Dutch

LANGUAGES
English (native), Dutch (full professional)

EDUCATION

Ph.D. Computer Science 2017 - present
University of Waterloo, ON, Canada
Specialization: Human-Computer Interaction (HCI)
Advisor: Dr. Edith Law (School of Computer Science)
Thesis Focus: *Interaction Strategies for Pedagogical Conversational Agents*

M.Sc. Human-Machine Communication, *cum laude* 2014 - 2016
University of 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*

Honours Master High Tech Systems & Materials 2014 - 2016
University of Groningen, the Netherlands
A 1.5 year program followed alongside the regular Master's

B.Sc. Cognitive Systems, *with Distinction* 2009 - 2014
University of British Columbia, BC, Canada
Specialization: Cognition & Brain

ACADEMIC CONTRIBUTIONS

Ceha, J., Law, E., Kulic, D., Oudeyer, P-Y., and Roy, D. (2021). Identifying Functions and Behaviours of Social Robots during Learning Activities: Teachers' Perspective. [under review at *Intl. Journal of Social Robotics*]

Ceha, J., Lee, K. J., Nilsen, L., Goh, J., and Law, E. (2021). Can a Humorous Conversational Agent Enhance Learning Experience and Outcomes? To appear in *CHI Conf. on Human Factors in Computing Systems (CHI '21).* ACM, New York, NY, USA, 20 pages.

Appriou, A., **Ceha, J.**, Pramij, S., Dutartre, D., Law, E., Oudeyer, P-Y., and Lotte, F. (2020). Towards measuring states of epistemic curiosity through electroencephalographic signals. In *Proc. IEEE Intl. Conf. on Systems, Man, and Cybernetics (IEEE SMC 2020).*

Henderson, J., **Ceha, J.**, and Lank, E. (2020). STAT: Subtle Typing Around the Thigh for Head-Mounted Displays. In *Proc. 22nd Intl. Conf. on Human-Computer Interaction with Mobile Devices and Services (MobileHCI '20).*

Law, E., Ravari, P. B., Chhibber, N., Kulic, D., Lin, S., Pantasdo, K. D., **Ceha, J.**, Suh, S., and Dillen, N. (2020). Curiosity Notebook: A Platform for Learning by Teaching Conversational Agents. In *CHI '20 Extended Abstracts.*

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 Conf. on Human Factors in Computing Systems Proceedings (CHI '19).* 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.

Research

Pedagogical Agents/Social Robots 2017 - present
HCI Lab, University of Waterloo
- Enhancing learning outcomes with social A.I. agents

Speech Perception with Cochlear Implants 2015 - 2016
Dept. of Audiology, University Medical Centre Groningen
- Psychoacoustic experiments with simulations of bimodal hearing

Dept. of Experimental Psychology, University of Groningen
- EEG neurofeedback system for improving auditory speech perception

Cognitive and User 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
- Modeled human time perception using Adaptive Control of Thought-Rational (ACT-R) cognitive architecture
- Pupil dilation based interruption management system

Academic Experience

Programming and Statistics
MATLAB, Python, HTML, CSS, Processing, OpenViBE, R, Arduino, ROS

User Research
Lab & field studies with adults and children

Designing and conducting interviews, focus groups, questionnaires/surveys

Human physiology measurement
- Eye-Tracking/Pupil Dilation
- EEG, Electromyography (EMG) & Brain-Computer Interfaces (BCIs)

Transcription of audio and video data

Analysis of quantitative and qualitative data

Teaching
TA & IA: CS 105,106,349,449, University of Waterloo 2017 - present

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

Led a multi-day workshop on Human-Robot Interaction at Shad Canada, Waterloo July 2018

Instructor for UX design and research at GIRLsmarts4tech, Waterloo June 2018

Industry Experience

Research Internship, Philips, Drachten, the Netherlands 2014 - 2016
- As part of the *Honours Master*, conducted research on a technical challenge presented by Philips Consumer Lifestyle
- PCB basics; 3D printing; user studies

Honours and Awards

Natural Sciences and Engineering Research Council of Canada (NSERC) May 2019
Postgraduate Scholarship-Doctoral (PGS D)
Awarded to high-calibre scholars who are engaged in an eligible doctoral program in the natural sciences or engineering on a competitive basis ($42,000 CAD)

University of Waterloo President's Graduate Scholarship (PGS) May 2019
Provided to outstanding graduate students who hold certain major federally and provincially funded competition-based scholarships ($10,000 CAD annually)

University of Waterloo Provost Doctoral Entrance Award for Women Sept. 2017
Awarded by the Faculty of Mathematics to outstanding female PhD students on a competitive basis ($5,000 CAD)

Avril McDonald Award Aug. 2016
Awarded by the Rosalind Franklin Fellows of the University of Groningen on a competitive basis each year to 3-4 students to encourage promising female scientists to pursue an academic career (1,000 EUR)