Jessy Ceha

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Education

Ph.D. in Human-Computer Interaction	2021
University of Waterloo	*Waterloo, ON, Canada*

Supervisor: Prof. Edith Law

Thesis: Affective Expressions in Conversational Agents for Learning Environments:
Effects of curiosity, humour, and expressive auditory gestures

M.Sc. in Computational Cognitive Science	2016
University of Groningen (RUG)	*Groningen, the Netherlands*

Supervisor: Prof. Marieke van Vugt

Thesis: Investigation into the Enhancement of Voice Perception:
With simulations of cochlear implants and bimodal hearing

B.Sc. in Cognitive Systems	2014
University of British Columbia	*Vancouver, BC, Canada*

Experience

Research Assistant (Ph.D.)	2017 – Present
School of Computer Science, University of Waterloo	*Waterloo, ON, Canada*

Various projects focused on conversational agents (robots; chatbots; voice assistants).
Resulted in publications [P1], [P2], [P3], [P4], [P6], [P7].

Research Assistant (M.Sc.)	2015 – 2016
Dept. of Audiology, University Medical Centre & Dept. of Experimental Psychology, RUG	*Groningen, the Netherlands*

Psycho-acoustic experiments with simulations of bimodal hearing [P8] and EEG
neurofeedback for improving auditory speech perception for cochlear implant wearers.

Intern	2014 – 2016
Philips	*Drachten, the Netherlands*

Alongside Master's degree, worked with the Philips Consumer Lifestyle division to
conduct product development and user research.

Research Assistant (M.Sc.)	2014 – 2016
Institute of A.I. and Cognitive Engineering, RUG	*Groningen, the Netherlands*

Conducted research on cognitive and user modelling.

Skills

Technical
R, SPSS, Python, Java, MATLAB, Javascript, HTML/CSS, OpenViBE, Arduino, ROS

Research
Applied experience with adults & children in clinical, field, & lab settings
Study design (incl. literature review, ethics, data analysis, & manuscript writing)
Conversational interaction design (incl. dialog generation, speech synthesis, & user experience)
Human-physiology measurement (EEG, EMG, pupil dilation, eye tracking)
Interview and questionnaire design & administration
Usability testing
Participatory & Co-design methodologies
Qualitative & Quantitative data collection & analysis

Refereed Publications

*** *Note on conference papers: in Human-Computer Interaction, these are the preferred publication venues, being timelier and having the greatest impact. Top-tier conferences require rigorous multi-stage review of manuscripts for archival proceedings.*

[P1] **Ceha, J.** and Law, E. (2022).
Expressive Auditory Gestures in a Voice-Based Pedagogical Agent.
To appear in Proceedings of CHI Conference on Human Factors in Computing Systems (CHI '22).

[P2] **Ceha, J.**, Law, E., Kulić, D., Oudeyer, P-Y., and Roy, D. (2021).
Identifying Functions and Behaviours of Social Robots for In-Class Learning Activities: Teachers' Perspective.
International Journal of Social Robotics. Springer Nature B.V., 1-15.

[P3] **Ceha, J.**, Lee, K. J., Nilsen, L., Goh, J., and Law, E. (2021).
Can a Humorous Conversational Agent Enhance Learning Experience and Outcomes?
In Proceedings of CHI Conference on Human Factors in Computing Systems (CHI '21). ACM, New York, NY, USA, Article 685, 1–14. **Best Paper Honorable Mention (Top 5% of submissions).** [Acceptance rate: 23%]

[P4] 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.
2020 IEEE International Conference on Systems, Man, and Cybernetics (SMC), 2020, pp. 4006-4011.

[P5] Henderson, J., **Ceha, J.**, and Lank, E. (2020).
STAT: Subtle Typing Around the Thigh for Head-Mounted Displays.
In 22nd International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI '20). ACM, New York, NY, USA, Article 27, 1–11. [Acceptance rate: 24%]

[P6] Law, E., Ravari, P. B., Chhibber, N., Kulić, 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 Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '20). ACM, New York, NY, USA, 1–9.

[P7] **Ceha, J.**, Chhibber, N., Goh, J., McDonald, C., Oudeyer, P-Y., Kulić, D., and Law, E. (2019).
Expression of Curiosity in Social Robots: Design, Perception, and Effects on Behaviour.
In Proceedings of CHI Conference on Human Factors in Computing Systems (CHI '19), May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, 11 Pages. [Acceptance rate: 23.8%]

[P8] Başkent, 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), EL292.

Non-Refereed Publications

[N1] **Ceha, J.** (2021). *Affective Expressions in Conversational Agents for Learning Environments: Effects of curiosity, humour, and expressive auditory gestures.* Ph.D. Dissertation, University of Waterloo, Canada.

[N2] Law, E., Nilsen, E., Lee, K.J., Chauhan, A., **Ceha, J.**, Baghaei, P., Debbane, A., and Yang, K. (2020). *Learning and Teaching with Conversational Agents.* In CHI 2020 Workshop on Grand Challenges in Conversational UI.

[N3] **Ceha, J.** (2016). *Investigation into the Enhancement of Voice Perception: with simulations of cochlear implants and bimodal hearing.* Master's Thesis, University of Groningen, the Netherlands.

Teaching

CS 449/649 – Human-Computer Interaction – Teaching Assistant (TA)   2020, 2021
University of Waterloo

CS 349 – Introduction to User Interfaces – TA/Instructional Apprentice   2018, 2020
University of Waterloo

CS 106 – Introduction to Computer Programming 2 – TA/Instructional Apprentice   2018, 2021
University of Waterloo

CS 105 – Introduction to Computer Programming 1 – TA/Instructional Apprentice   2017, 2018, 2019
University of Waterloo

Awards

NSERC Postgraduate Scholarship-Doctoral   2019 – 2021
University of Waterloo

> Awarded by the Natural Sciences and Engineering Research Council of Canada (NSERC)
> to high-calibre scholars on a competitive basis. Valued at $42 000 CAD.

University of Waterloo President's Graduate Scholarship   2019 – 2021
University of Waterloo

> Provided to outstanding graduate students who hold certain major federally and provincially
> funded competition-based scholarships. Valued at $10 000 CAD annually.

Math Domestic Graduate Student Award   2017 – 2021
University of Waterloo

> Awarded to incoming Canadian graduate students. Valued at $6 000 CAD annually.

University of Waterloo Provost Doctoral Entrance Award for Women   2017
University of Waterloo

> Awarded by the Faculty of Mathematics to outstanding female Ph.D. students on a competitive basis.
> Valued at $5 000 CAD.

Avril McDonald Award   2016
RUG

> 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.
> Valued at $1 000 EUR.

Service

Peer Reviewer   2017 – Present
ACM venues (CHI, HRI, IDC), IEEE venues (HRI, ICDL), MDPI Journal Informatics

CHI Conference Student Volunteer   May 2019
ACM SIGCHI   *Glasgow, Scotland*

Educational Assistant   March 2019
Prueter Public School   *Kitchener, ON, Canada*

Workshop Chair – Human-Robot Interaction   July 2018
SHAD Canada   *Waterloo, ON, Canada*

Workshop Instructor – UX Design and Research   June 2018
GIRLsmarts4tech   *Waterloo, ON, Canada*