Jessy Ceha

205-350 Columbia Street West, Waterloo, ON, Canada, N2L 6P6
Tel: +1 519-580-6977, Email: jceha@uwaterloo.ca

Education

University of Waterloo, Waterloo, Canada

Ph.D. Computer Science: Human-Computer Interaction 2017 - 2021

Honours:

- Provost Doctoral Entrance Award for Women, Sept. 2017
  [*Awarded to outstanding female PhD students on a competitive basis*]
- University of Waterloo Entrance Scholarship, Sept. 2017

University of Groningen, Groningen, The Netherlands

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

Honours:

- Avril McDonald Prize, August 2016
  [*Awarded each year to 3 or 4 female Masters students, based on excellence*]

Thesis:

"*Investigation into the Enhancement of Voice Perception: with simulations of cochlear implants and bimodal hearing"*

Honours Master - High Tech Systems And Materials 2014 - 2016

1.5 year program, organized in cooperation with Philips and other major industry partners, worth 20 ECTS and followed in addition to the standard master's

- Attended weekly masterclasses and worked in a multidisciplinary team to produce an innovative product for Philips Consumer Lifestyle

University of British Columbia, Vancouver, Canada

B.Sc. Cognitive Systems: Cognition & Brain, *with Distinction* 2010 - 2014

Honours:

- Dean's Honour List, April 2014

Academic Contributions

Publications

- Başkent, D., Luckmann, A., **Ceha, J.**, Gaudrain, E., & 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-EL297.

Thesis

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

Conferences

- *Theta-band phase locking after attentional blink training*. **Jessy Ceha**, Trudy Buwalda, Niels Taatgen, Jelmer Borst, & Marieke van Vugt. December 2015. Poster presentation at the 15th NVP Winter Conference on Cognition, Brain, and Behaviour. Egmond aan Zee, the Netherlands.

Skills & Experience

Programming and Statistics

- Matlab, Python, HTML, CSS, Java, Processing, R, SPSS, OpenViBE - Software for Brain Computer Interfaces (BCIs)

Electroencephalography (EEG)

- Writing experiment code, experimental design, user studies, signal processing, data collection, and statistical analysis
  - Auditory-based BCI system for improving speech perception in cochlear-implant users
  - Theta oscillation phase-locking after attentional blink (AB) training

Psychoacoustic Experiments

- Conducting, designing, analyzing
  - User behavioural study with simulations of bimodal electro-acoustic cochlear-implant hearing

Eye-Tracking/Pupil Dilation

Cognitive Modelling

Presentations

- *Product Proposal*. Philips Consumer Lifestyle, Drachten, the Netherlands. May 2015

User studies & Co-design

Research on Innovative Product Design and Development

- Lead and mentored multidisciplinary team on aspects of computer science (Philips)
- Co-created and assembled electromyography powered, 3D-printed robotic hand

Research & Work Experience

University of Waterloo

Research Assistant Sept. 2017 - present

David R. Cheriton School of Computer Science

Human-Computer Interaction Lab: Dr. Edith Law (co-supervisor: Dr. Dana Kulic)
Current Projects:

- Investigating curiosity-driven learning with educational social robots
- Co-designing educational robot peer with teachers
- Neural correlates of curiosity (in collaboration with Inria Bordeaux POTIOC - Dr. Fabien Lotte)

Teaching & Instructional Assistant Sept. 2017 - present

- Hold office hours, conduct tutorials and labs, mark assignments and exams

University Medical Centre Groningen

Research Assistant May 2016 - Dec. 2016

Department of Otorhinolaryngology (Audiology)

Speech Perception Lab: Dr. Deniz Başkent (co-supervisor: Dr. Marieke van Vugt)

- Conducted and published psychoacoustic experiments with simulations of bimodal electro-acoustic cochlear-implant hearing

University of Groningen

Research Assistant Oct. 2015 - May 2016

Department of Experimental Psychology

Belief, Perception, and Cognition Lab: Dr. Jacob Jolij (co-supervisors: Dr. Deniz Başkent & Dr. Marieke van Vugt)

- Developed EEG neurofeedback system (Brain-Computer Interface) for improving auditory speech perception in cochlear-implant users

Research Assistant April 2015 - Dec. 2015

Institute of Artificial Intelligence and Cognitive Engineering

Cognitive Modelling Group: Dr. Marieke van Vugt

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

Intern Feb. 2015 - July 2015

Philips Consumer Lifestyle (Engineering Department)

- Manufactured, tested and finalised a product

University of British Columbia

Research Assistant Jan. 2014 - May 2014

Department of Linguistics

The “eh” Lab - Dr. Martina Wiltschko

- Behavioural study on the syntax of speech acts

Volunteering

SHAD - Waterloo, Canada July 2018
Annual Canadian summer enrichment program for high-achieving high school students
Held a 3-day workshop on Human-Robot Interaction

GIRLsmarts4tech - Waterloo, Canada June 2018
Outreach program aimed at inspiring girls to explore technology
Volunteer at day-long workshop where girls learned and used various aspects of computer science

Dave and Jan Jaworsky's Girls in STEAM event - Waterloo, Canada Jan. 2018
Role model for elementary & middle school girls

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

Best Buddies - Waterloo, Canada Oct. 2017 - May 2018
Weekly volunteering with individuals with developmental or intellectual disabilities

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

Personal Attributes

- Hard-working and dependable
- Strong desire to learn and be challenged
- Both independent and a team worker
- Adaptable and a problem-solver

Nationalities

- Canadian
- Dutch

Languages

- Native English
- Dutch
- School-level German