

ALEXANDRA (SASHA) VTYURINA

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EDUCATION

UNIVERSITY OF WATERLOO, Waterloo, ON, Canada *Sep 2014 - Present*
PhD student in Human-Computer Interaction lab and Data Systems Group.
Advisors: Edith Law and Charles L.A. Clarke.
I investigate ways in which humans interact with voice-based conversational assistants, and study methods that improve human-computer conversations for various tasks.

SOUTHERN FEDERAL UNIVERSITY, Rostov-on-Don, Russia *2011-2013*
Master of applied mathematics and computer science *GPA 4.8/5*
Advisors: Sergey Anishenko and Vitaly Bragilevsky
Master's thesis: *Video-based analysis of human body motion.*
Signal processing algorithms were used to discover repetitive patterns in human behavior. The project includes processing video collected with Kinect, detecting face area, calculating parameters describing movement of a person over time. The objective of the work was to prototype a system that monitors airplane pilots activity and detects signs of fatigue and tiredness in order to prevent airplane accidents. This work was a part of A. Kogan Research Institute group project.

SOUTHERN FEDERAL UNIVERSITY, Rostov-on-Don, Russia *2007-2011*
Bachelor of applied mathematics and computer science
Advisor: Vitaly Bragilevsky
Bachelor's thesis: *Maze navigation using computer vision.*
The work included building a mathematical model of a maze based on its aerial image.

WORK EXPERIENCE

RESEARCH INTERN *Jun - Sept 2018*
Microsoft Research, Redmond, WA, USA.
I worked on understanding issues of online web browsing by people who are blind, and developed a voice-based system prototype to help mitigate them.

RESEARCH INTERN *Jun - Sept 2017*
Microsoft Research, Redmond, WA, USA.
I have explored ways to improve user experience with voice-based conversational assistants for guided task support.

TEACHING ASSISTANT *2014 - Present*
University of Waterloo, Waterloo, ON, Canada
TA/IA for CS 349 – User Interfaces (Winter 2019 - Fall 2019)
TA for CS 343 – Concurrent and Parallel Programming (Fall 2017, Winter 2018)
IA/TA for CS230 - Introduction to Computers and Computer Systems (Fall 2014, Fall 2015 - Spring 2016, Winter 2017)
TA for CS241 - Foundations of Sequential Programs (Spring 2015, Fall 2016)
TA for CS492 - Social Implications of Computing (Winter 2015)
Responsibilities include teaching tutorials, maintaining office hours, communicating with students, marking assignments.

OBJECTIVE C DEVELOPER

Apr - Aug 2014

OOO "Tochka Kipenia", Rostov-on-Don, Russia.

I developed a framework that provides assistance and partial automation for manual testing. The framework collects available system data (such as device model, memory available) and snapshot of the error, automatically creates a new issue in the bug tracker.

RESEARCH INTERN

Jun - Sept 2013

Microsoft Research, Redmond, WA, USA.

Worked on a crowdsourcing project, which involved development using ASP.NET, Javascript and TouchDevelop as well as creating an application for Windows Phone.

JUNIOR RESEARCHER

May 2012 - Mar'14

A.Kogan Research Institute for Neurocybernetics, Robotics and Machine Vision group, Rostov-on-Don, Russia.

I was a part of a group that implemented a prototype of a system that monitors airplane pilots activity and detects signs of fatigue and tiredness in order to prevent airplane accidents.

Implemented a gesture recognition unit for a mobile platform.

PUBLICATIONS

- **Vtyurina A.**, Fourney A, Morris MR, Findlater L, White RW. *VERSE: Bridging Screen Readers and Voice Assistants for Enhanced Eyes-Free Web Search.* // ASSETS 2019.
- **Vtyurina A**, Fourney A. *Exploring the Role of Conversational Cues in Guided Task Support with Virtual Assistants.* // CHI 2018.
- **Vtyurina A**, Savenkov D, Agichtein E, Clarke C. *Exploring Conversational Search With Humans, Assistants, and Wizards.* // Late-Breaking Work, CHI 2017.
- **Vtyurina A**, Clarke C. *Let me Google it for you.* // Second WebQA workshop on SIGIR 2016.
- **Vtyurina A**, Clarke C. *WaterlooClarke: TREC 2016 LiveQA Track.* // TREC 2016.
- Sarrafzadeh B, **Vtyurina A**, Lank E, Vechtomova O. *Knowledge Graphs versus Hierarchies: An Analysis of User Behaviours and Perspectives in Information Seeking.* // In Proceedings of the 2016 ACM on Conference on Human Information Interaction and Retrieval 2016 Mar 13 (pp. 91-100). ACM.
- **Vtyurina A**, Dey A, Sarrafzadeh B, Clarke C. *WaterlooClarke: TREC 2015 LiveQA Track.* // TREC 2015.
- **Vtyurina A**, Anishchenko S, Petrushan M, Shaposhnikov D. *Video-based analysis of human motor activity for functional state estimation.* // In Proc. XVI International Conference on Neurocybernetics, 2012, Rostov-on-Don, Russia. - v.2. - p. 254-256

LANGUAGES

English	Fluent
Russian	Native
French	Beginner

SUMMER SCHOOLS

Microsoft Research Summer School for PHD Students, 2012, Cambridge, UK

Microsoft Research Computer Vision Summer School, 2011, Moscow, Russia