

ALEXANDRA VTYURINA

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EDUCATION

UNIVERSITY OF WATERLOO, Waterloo, ON, Canada *Sep 2014 - Present*
PhD student in Human-Computer Interaction and Data Systems groups.
Advisor: Edith Law and Charles Clarke.
Research subject: I am currently studying user behavior in human-computer conversations, and striving to improve intelligent assistants.

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 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 for CS 343 – Concurrent and Parallel Programming (Fall 2017)
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.
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**, 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

TECHNICAL SKILLS

Languages	Python, Java, C++. Previous experience with Objective C, C#
Data analysis tools	pandas, numpy, scikit-learn, Matlab
OS	OS X, Linux, Windows

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

OTHER INTERESTS

Squash, skiing.