TuuliPöllänen

about

tuuli.pollanen@gmail.com
web-psychometrics.com
www.github.com/tuuleh

languages

native Finnish
fluent English/Slovene
intermediate Swedish
basic German

technology

JavaScript
HTML & CSS
R, Python
GNU/Linux
IRTpro, SPSS
basic Git and SQL

interests

user experience research, front-end and web development, web-based experiments, statistics, psychometrics, cognitive and computational psychology

education

2012–2014 **MA, Psychology** — University of Ljubljana
GPA - 3.8
Completed a module on cognitive neuroscience and advanced research methodology
Thesis: *The influence of cognitive skills and team cohesion on performance in Multiplayer Online Battle Arena*

2008-2012 **BA, psychology** — University of Ljubljana
GPA - 3.6
Several research projects and literature reviews on computational and cyber psychology

2012- **BS, computer science** — University of Ljubljana

experience

2013- **Cyberpipe** — Community manager / volunteer
Hosting talks on psychology and IT, volunteering as a mentor at programming workshops for kids, organized the new headquarters.

04–06 2014 **3fs d.o.o, Kranj** — Product manager / UX research intern
Product development, user experience and market research, QA testing.

03–05 2014 **Hekovnik, Ljubljana** — Freelancer - psychometrics and research design
Constructed a battery for discovering entrepreneurial potential in workshop applicants.

03–04 2014 **Diplo Foundation, Geneva** — Freelancer - research methodology, text analysis
Worked together with a computational linguist to analyse patterns in contributions sent to a diplomatic conference on cybersecurity and internet governance.

03–05 2013 **Populus Landscape Architecture, Ljubljana** — Freelancer - survey methodology and statistical analysis
Consulted a landscape architect on survey methodology; analysed and made inferences from data regarding architectural renovations in Tolmin.

applications and projects

2014 **The anatomy of a gamer** Click here to view the project on GitHub, or click here to read the paper.
I built a Node.js application with 25-minute web-experiment consisting of surveys and cognitive taks for my research on how cognitive skills and team cohesion relate to player performance in League of Legends.

2014 **Sudoku solver** View the project on GitHub.
I wrote a Python script that solves any Sudoku puzzle using three heuristic strategies and recursive search. Try it out!

2014 **Pilot study - The relationship between ambition, curiosity, educational expenditure and GDP per capita.** Click here to read the paper.
Me and a colleague triangulated data from a UNESCO database and the International Wellbeing Study to discover whether ambition and curiosity relate to macroeconomic variables.

2013 **Psychometric Artificial Intelligence** Click here to read the paper.
A literature review on psychometric AI - brute force solutions to solve tasks on intelligence tests

2013 **Cognitive architectures and their use in cognitive psychology** Click here to read the paper.
How cognitive architectures can be utilized on top of expert systems in applied cognitive psychology

2012 **Pilot study - Cyberbalkanization on Reddit** Click here to read the summary.
I wanted to find out whether opinion-based voting relates to ideological segregation on Reddit.

presentations and talks

2014 **jsPsych on Node.js with Express 4.0 and Sequelize** Click here for Slides, and Blog post
My experience designing and launching a web experiment on Node.js, thoughts about the data storage and on imputation of non-random missing data.

2014 **The advantages and challenges of web-based experiments** Announcement, Blog post
Technical challenges in design of web-based experiments for cognitive sciences, how to mitigate them, and how they manifest in the data.

2014 **The interplay between psychology and information technology** Slides, Blog post
I talked about how psychology is present in every aspect of technology, and how well-designed technology is a natural extension to our socio-cognitive processes.

2013 **Virtual reality exposure therapy to treat anxiety disorders** Slides
How virtual reality overcomes barriers of care and enables exposure therapy in cases where it is otherwise impossible.

2013 **A reflection on psychometric artificial intelligence** Slides, Paper
The use and abuse of psychometric tests in the creation of AI entities, and the practical applications and limitations of the PAI approach.

2012 **Cognitive architectures in applied cognitive psychology** Slides, Paper
I explored how - and if - cognitive architectures can be utilized in applied cognitive psychology as an addition to expert systems.

2012 **Computer models of creativity** Slides
A presentation on how different types of AI models carry relevance for modeling creativity.

2011 **Cognitive ergonomics, HCI and Nielsen's heuristics** Slides
I presented the basics of human-computer interaction and cognitive ergonomics to my fellow psychology students.