

# Velian Pandeliev

[www.velian.ca](http://www.velian.ca) | [v.pandeliev@utoronto.ca](mailto:v.pandeliev@utoronto.ca)

References available upon request

## SUMMARY

A versatile professional with a background in human-computer interaction, human cognition, and computer science supported by interdisciplinary experience from industry and academia and two years of preparing user experience research and design professionals in a Master's program at a world-renowned Canadian university.

## EDUCATION

### Doctoral Research, Computer Science (Human-Computer Interaction)

University of Toronto, Toronto, ON

*Withdrawn in good standing (ABD)*

- Spearheaded research on interfaces to support the companion activities of responsive reading, i.e., non-linear navigation, superimposed annotation, spatial arrangement
- Completed courses on research methods, serious games, reading comprehension and cognition, and novel interaction techniques
- Supervised a dozen undergraduate projects in areas such as responsive reading, educational technology, and law
- Presented, volunteered, and reviewed submissions for multiple HCI conferences
- Reviewed candidates for the department's M.Sc. in Applied Computing program

### M.Sc. Computer Science (Human-Computer Interaction)

University of Toronto, Toronto, ON

*Supervisor: Prof. Ronald Baecker*

- Developed an online portal to evaluate the effectiveness of mental fitness games on cognitive function in elderly users
- Validated the prototype with six seniors
- Presented results at multiple conferences on serious games, cognitive health, and human-computer interaction

### B.A. Cognitive Science (Cognition & Computation)

Carleton University, Ottawa, ON

*Supervisor: Prof. Chris Herdman, Graduated with High Distinction*

- Earned an interdisciplinary degree encompassing computer science, artificial intelligence, neuroscience, cognitive psychology, and philosophy of mind
- Successfully completed an Honours project on the effects of visual or auditory distraction on drivers in a state-of-the-art driving simulator
- Awarded the Senate Medal for Outstanding Academic Achievement

## SKILLS AND TRAINING

### User Experience Design

- A holistic approach to human-centred design including rapid iteration cycles and constant validation from discovery to live deployment
- Producing intermediate design artifacts such as sketches, storyboards, and scenarios
- Conducting ideation, design critique, and heuristic evaluation sessions with diverse teams
- Rapid prototyping using paper, HTML/CSS/JS, and Bootstrap
- Applying and contributing to templates, prototypes, and design systems using Figma
- Passion for universal design and familiarity with co-design methods, the social and medical models of disability, Microsoft's Inclusive Design Toolkit and WCAG 2.1.

### User Research

- Designing and moderating generative and evaluation user research through interviews, questionnaires, user observation, diary studies, and think-aloud protocols
- Training in research ethics, participant interaction, and informed consent
- Analysis and synthesis of qualitative insights and quantitative KPIs
- Experience with Tobii gaze-tracking hardware and multi-source data triangulation
- Distilling insights into personas, experience maps, user journeys, job stories, or themes
- Evaluating interfaces and prioritizing issues using heuristic evaluation protocols
- Generating reports or presenting research findings to design and development teams

### Technical Skills

- Familiarity with Agile, User-Centred Design, and Lean UX methodologies
- Instructor-level proficiency in programming, algorithmic complexity, and data structures
- Programming experience in Python, HTML/CSS/JavaScript, JQuery, Django, and Flask
- Proficiency in version control, unit testing, productivity software, \*nix shell
- Close familiarity with the Project Management Institute's PMBOK curriculum

### Interpersonal Skills

- Trust, rapport, and sensitivity interacting with users to elicit feedback and insights
- Excellent communication with clients, stakeholders, team members, and executives
- Experience developing and delivering impactful presentations targeted to any audience
- Fluent in English and Bulgarian, four years of Core French in an Ontario High School

### Teaching and Mentorship

- Nine years of teaching experience at the undergraduate and graduate level in traditional, flipped, and technology-enhanced active learning classrooms
- Experience with close individual mentoring and coaching for a wide range of skill levels
- Contributed to a community of practice in UX education and curriculum development
- Situated lectures in practical real-world contexts using the apprenticeship model
- Emphasis on preparing students for continuous, lifelong learning in rapidly advancing fields

## WORK EXPERIENCE

### Assistant Professor, Teaching Stream, University of Toronto

*Faculty of Information, Jan. 2019 - Present*

- Taught core user interface design and user research courses in the UX design concentration of an interdisciplinary professional Master of Information program
- Developed a special topics graduate course on the user experience of video games
- Leveraged industry experience into professionalization training for students in UX design, programming, and project management courses
- Adopted universal access and inclusive design methodologies in teaching and practice
- Conducted portfolio review clinics and student career mentorship in UX Design

### User Research Moderator, Ubisoft Toronto

*User Research Team, Oct. 2017 - Dec. 2018*

- Designed user testing protocols, surveys, and interview prompts to identify top usability and gameplay issues in upcoming AAA video games at various stages of completion
- Conducted scripted usability think-aloud sessions and game appreciation tests
- Synthesized qualitative and quantitative insights into recommendations for design teams

### User Experience Research Intern, HP Inc.

*Immersive Experiences Lab, Summer 2016*

- Performed mixed methods research on the tools and practices of 31 creative professionals
- Generated rich insights into design and sketching workflows using thematic analysis
- Presented results to stakeholders and executives to guide the creation of new products

### User Experience Intern, VMware, Inc.

*Cloud Platform Business Unit, Summer 2015*

- Performed primary user research and analysis, and synthesized findings
- Developed a model of trust for system administrators using decision-supporting dashboards to define established professionals' acceptance of service recommendations

### Course Lecturer, University of Toronto

*Department of Computer Science, Sep. 2014 - August 2016*

- Was primarily responsible for teaching the undergraduate CS course introducing the practice and academic discipline of HCI to 10 sections over 6 terms
- Taught and TA'd a range of courses in computer science
- Mentored several undergraduate CS capstone projects

### Bilingual Alignment and HTML Standards Intern

*Communication and Library Services, Statistics Canada (May 2008 - April 2009)*

- Collaborated with natural language processing researchers and data scientists to automate page alignment between English and French documents

### Simulation Support Technician

*Advanced Cognitive Engineering Lab, Carleton University (Summer 2007 - Summer 2008)*

- Conducted cognitive psychology research on operator attention and distraction with drivers and helicopter pilots as part of Honours thesis
- Built and prototyped simulations and experimental scenarios

## TEACHING EXPERIENCE

### Faculty of Information, University of Toronto

*Assistant Professor, Teaching Stream*

**INF2191:** User Interface Design, *Winter 2019, Winter 2020*

**INF2040:** Project Management, *Winter 2019, Winter 2020*

**INF2300:** User Experience and Design for Video Games, *Fall 2019*

**INF1340:** Programming for Data Science, *Fall 2019*

### Department of Computer Science, University of Toronto

*Course Instructor / Lecturer*

**CSC428/CSC2514:** Human-Computer Interaction, *Winter 2018*

**CSC318:** Design of Interactive Computational Media, *2014-2017*

**CSC148:** Introduction to Computer Science, *Spring 2012, Fall 2012, Summer 2013*

**CSC108:** Introduction to Computer Programming, *Spring 2011*

*Undergraduate Mentor*

**CSC494:** Undergraduate capstone project, *Summer 2015 - Spring 2016*

*Teaching Assistant*

Software Design, Introduction to Computer Science, Introduction to Computer Programming, Mathematical Expressions and Reasoning, *2009 - 2014*

## PUBLICATIONS

Pandeliev, V. Ungrading Themes for Upgrading UXD Assignments. (April 2020) In St-Cyr, Olivier, et al. "EduCHI 2020: 2nd Annual Symposium on HCI Education." Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems. 2020.

Akcayir, G., Chen, Z., Demmans Epp, C., Pandeliev, V., & Munteanu, C. (2020). Two Case Studies of Online Discussion Use in Computer Science Education: Deep vs. Shallow Integration and Recommendations. In L. Wilton & C. Brett (Eds.), Handbook of Research on Online Discussion-Based Teaching Methods: (pp. 409–434). IGI Global.  
<https://doi.org/10.4018/978-1-7998-3292-8.ch017>

Phirangee, K., Demmans Epp, C., Pandeliev, V., & Munteanu, C. (2019, April). Reflective Teaching Practices in Computer Science? A Tale of Two Instructors. Annual Meeting of AERA.

R.M. Baecker, N. Shim, K. Tonon, V. Pandeliev, J. Birnholtz, Y. Stern, J.R. Steinerman, K. Moffatt (2010). 'Serious' online gaming environments to enhance brain fitness in senior citizens. Gerontechnology, 9(2), 190-190. <https://doi.org/10.4017/gt.2010.09.02.265.00>

Pandeliev, V. & Baecker, R. (2010, May). A Framework for the Online Evaluation of Serious Games. Proceedings of the International Academic Conference on the Future of Game Design and Technology, Vancouver. BC.

Roberts, M. A., LeFevre, J., Penner-Wilger, M., & Pandeliev, V. (2006, November). Fowr + Siks: Pseudohomophones and the impact of phonological codes in solving simple arithmetic problems. Accepted for presentation at the annual meeting of the Psychonomic Society, Houston, TX.