# Zofia Samsel

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# EDUCATION

#### Master's degree | Learning Planet Institute, EURIP, Université Paris Cité, Paris

#### SEPTEMBER 2023 - NOW

#### AIRE Digital Science

- Awarded with the Foundation Bettencourt-Schueller Scholarship for M1 and the EURIP Graduate School Scholarships for M2.
- 1st year GPA: 18.50/20
- Relevant Courses: Data science, NLP, Python, AI, Project Management, Virtual Reality for Education
- Student representative of AIRE Digital Science represented the student body, and successfully resolved academic issues, promoting a collaborative and inclusive atmosphere.

#### Bachelor's degree | Jagiellonian University, Krakow, Poland

#### OCTOBER 2020- AUGUST 2023

#### **Cognitive Science**

- Diploma with Honors; Overall GPA 4,78/5
- Awarded with a scholarship for top 10% of students after 1st and 2nd year.
- Relevant Courses: Artificial Intelligence, Statistics, Modeling, Machine Learning of EEG, Python, Data Visualization, User Experience Design
- Represent student as a student representative during all three years.
- Bachelor thesis: researching the use of haptic patterns in obstacle location recognition.
  - The objective of this project was to identify the most effective tactile pattern for a navigation warning system, aimed at enhancing performance and unambiguously alerting users about potential obstacles. The patterns were simulated by the bHaptics TackSuit X40 haptic vest and the program is written in Python.
- Member of the Social Robotics Lab:
  - Assisted in the 6 Senses project, which designed a VR program to enhance driver safety by displaying additional navigation information.
  - Conducted a study using a social robot NAO in cafes to examine customer attitudes and perceptions towards the barista robot across various interaction scenarios. The research findings were shared in an article at the 15th International Conference on Social Robotics (ICSR 2023) held in Doha, Qatar.
- Member of the Cognitive Science Club at UJ
  - Participated in organization of the 13<sup>th</sup> and 14<sup>th</sup> Cracow Cognitive Science Conference, where assisted in managing event logistics and communication between the organizing committee and attendees.

#### Secondary education | Jozef Poniatowski Fifth High School in Warsaw, Poland

#### SEPTEMBER 2016 - SPETEMBER 2019

- Final Year GPA 4,94/6
- Final exam average score 76% (centile 83)
- Basic exams: Polish, English, Mathematics; Extended exams: Chemistry, Biology, Mathematics, English

### **EXPERIENCE**

#### Augmented Reality liver reconstruction | LISN, Université Paris Saclay & BOPA, AP-HP, Paris INTERN MARCH 2024 – JULY 2024 | OCTOBER 2024 – JANUARY 2025 (NOW)

- Led a research project focused on creating an augmented reality tool for real-time organ visualization during liver surgery.
- Conducted observations and interviews with medical personnel to understand surgeons' requirements and workflow dynamics.
- Developed an AR application using Unity, OpenXR for the Canon MReal HMD.

- Designed an experiment to assess the app's efficacy and its influence on surgeons' performance and team communication within the operating room.
- Collaborated with multiple institutions to ensure the tool effectively addressed surgeons' needs while overcoming technical challenges.

#### Virtual Reality and Affective Touch | Institut des Systèmes Intelligents et de Robotique, Sorbonne Université, Paris

#### **INTERN** JULY 2023 – SEPTEMBER 2023

- Conducted a study on VR and affective touch under the supervision of PhD student.
- Developed two VR experiment procedures using Unity, C#, and haptics actuators.
- Conducted quantitative data analysis using RStudio and MatLab.

Lead Volonteer 2nd and 3rd Virtual Reality Conference 'Wirtualium' TEAM LEADER NOVEMBER 2022 – NOW

- Led a 5-person team for communications with speakers and keynote speakers.
- Applied and secured funding and grants for conferences organization.
- With 3 other young researchers designed and conducted a study on participants' experience during remote conferencing in 3D settings.

# SKILLS

- **Programming**: Python, SQL, Machine Learning, C#, R
- Data visualization: Pandas, Numpy, Scikit Learn, PyTorch, Matplotlib, Seaborn
- **Software**: Python, GitHub, Unity, RStudio, Tableau (basics)
- Soft Skills: Problem-solving, Agile Project Management, Communication
- Language: English Fluent (C1; IELTS score 7.5), French A1, Polish Native Speaker

# ARTICLES

- Kiraga, M., Samsel, Z., Indurkhya, B. (2024). A Field Study on Polish Customers' Attitude Towards a Service Robot in a Cafe. In: Ali, A.A., et al. Social Robotics. ICSR 2023. Lecture Notes in Computer Science(), vol 14454. Springer, Singapore. https://doi.org/10.1007/978-981-99-8718-4
- Waligórski, J., Samsel, Z., Cząstkiewicz, A., & Frys, N. (2023). Reimagining Online Academic Conferences: The Promise of Social Virtual Reality for the Return of Co-Presence. International Journal of Research in E-learning, 1-24. <u>http://dx.doi.org/10.31261/IJREL.2023.9.2.05</u>
- Samsel, Z. et al. (2024) A Comparison of Vibrotactile Patterns in an Early Warning System for Obstacle Detection Using a Haptic Vest. Applied Ergonomics (Under Review)
- Waligórski, J., Butkiewicz, S., Z., Cząstkiewicz, A., & Samsel, Z. (2024). Carrying the Burden of Innovation in Education: Collaborative and Analytic Autoethnography of Becoming Educational Events Organizers in Social Virtual Reality (Under Review)

## PRESENTATIONS

- Presentation: 'Revolutionizing Academic Conferences: Exploring the Educational Potential of Social VR Environments' at the 3rd International Youth Conference on Language and Education (October 2023)
- Poster: 'A Field Study on Polish Customers' Attitude Towards a Service Robot in a Cafe' at <u>the 15th International</u> <u>Conference on Social Robotics (ICSR 2023)</u> in Doha (December 2023)
- Presentation: 'Metaverse University: Redefining Event Experiences through Virtual Reality' at <u>the 20th</u> <u>International Conference "ALTA'23 - Advanced Learning Technologies and Applications. Empowering learning</u> <u>through digital pedagogy"</u> (December 2023)
- Presentation: 'How Can Virtual Reality Enhance Communication During Online Academic Conferences?' at the <u>14h Irish Conference on Game-Based Learning</u> (June 2024)