Anastasia S. Apeiron

Utrecht, Netherlands
a.s.apeiron@uu.nl

EDUCATION

Utrecht University *October 2023 - Present*
PhD in Information and Computing Sciences
Department of Information and Computing Sciences
Thesis: *Responsible Autonomy for Hybrid Intelligence*

Uppsala University *August 2021 - June 2023*
Masters in Human-Computer Interaction
Departments of Informatics and Media, and Information Technology
Thesis: *Behavioural Observations as Objective Measures of Trust in Child-Robot Interaction: Mutual Gaze*

Simon Fraser University *September 2016 - June 2021*
Bachelors in Cognitive Science, Certificate in the Methodology of Science
Departments of Computer Science, Philosophy, Linguistics, Psychology, and Mathematics

RESEARCH EXPERIENCE

Hybrid Intelligence Centre Utrecht, Netherlands
Utrecht University *October 2023 - Present*

Supervised by Dr. Pinar Yolum and Dr. Pradeep Murukannaiah
Jointly supervised under Utrecht University and TU Delft for my doctoral degree, I am investigating the definition, implementation, and management of consent for hybrid intelligence systems to enable responsible agent autonomy. The trajectory of my research entails the development, evaluation, and implementation of a formal representation of consent through several user studies and multiagent society simulations.

Uppsala Social Robotics Lab Uppsala, Sweden
Uppsala University *October 2021 - June 2023*

Supervised by Dr. Ginevra Castellano and Natalia Calvo-Barajas
While working as a a volunteer, my task was to collect data through interviewing 52 children (ages 7-10) to determine if lexical alignment is an objective measure of trust in child-robot interaction. This also included setting up the environment, leading each interview activity, and assisting the final disclosure activity.
As a part of my internship at USRL (August 2022 - November 2022), my tasks included analysing the gathered data. This includes data annotation, data extraction, designing coding schemes, and data transcriptions. In addition to a quantitative analysis, I utilised my background in psychology and affective computing to extract features that could be analysed in a qualitative analysis.
As a part of lab activities alongside my duties, I have assisted other PhD students in data collection involving children, and in designing online studies.

RESEARCH EXPERIENCE (CONT.)

Robots with Social Intelligence and Empathy Lab Vancouver, Canada
Simon Fraser University *February 2019 - April 2021*
Supervised by Dr. Angelica Lim and Dr. Eldon Yellowhorn
The Blackfoot Revitalization project aims to create the environment and opportunity for students to learn Blackfoot and other indigenous languages through utilising the Pepper robot as an instructor.
My task was to design a reliable and effective method of teaching Blackfoot and to assist in the linguistic transcriptions and subsequent application to Pepper.
In the lesson development, I utilised my background knowledge in language education and second language acquisition along with several months of literature mining.
The linguistic transcriptions relied on my prior education in linguistics and computer science to produce machine-readable Blackfoot transcribed from local elders.
The contributions detailed above have helped expand this project to include the Cree language as well.

Robots with Social Intelligence and Empathy Lab Vancouver, Canada
Simon Fraser University *November 2018 - February 2019*
Supervised by Dr. Angelica Lim
Private research done in conjunction with several PhD students on the use of machine learning to aid the development of organizational software to aid in an efficient and sustainable shopping experience.
My task in this project was to help set up the laboratory environment for experimental surveys and in the design of software implementation of this project.

Department of Philosophy Vancouver, Canada
Simon Fraser University *August 2018 - November 2018*
Supervised by Dr. Nicolas Fillion
Literature review and research done in the field of mathematical and axiomatic logic.
My task in this project was to conduct literature mining in the epistemological success of mathematics.

PUBLICATIONS

2025 **Anastasia S. Apeiron**, Davide Dell'Anna, Pradeep K. Murukannaiah, and Pınar Yolum. 2025. Model and Mechanisms of Consent for Responsible Autonomy. *In Proceedings of the 24th International Conference on Autonomous Agents and Multiagent Systems.* Forthcoming.

2024 Marc Fraile, Natalia Calvo-Barajas, **Anastasia S. Apeiron**, Giovanna Varni, Joakim Lindblad, Nataša Sladoje, and Ginevra Castellano. 2024. UpStory: the Uppsala Storytelling dataset. *arXiv preprint arXiv:2407.04352* (2024).

Natalia Calvo-Barajas, **Anastasia Akkuzu**, and Ginevra Castellano. 2024. Balancing Human Likeness in Social Robots: Impact on Children's Lexical Alignment and Self-disclosure for Trust Assessment. *ACM Transactions on Human-Robot Interaction 13, 4* (2024), 1–27.

2023 **Anastasia Akkuzu**, Natalia Calvo-Barajas, and Ginevra Castellano. 2023. Behavioural Observations as Objective Measures of Trust in Child-Robot Interaction: Mutual Gaze. *In Proceedings of the 11th International Conference on Human-Agent Interaction.* 452–454.

TECHNICAL SKILLS

Languages: **Python 2.7, Python 3, C/C++17, Haskell, PHP, HTML/CSS/JavaScript**

Tools: **PRAAT, ELAN, Choreographe, FurHat SDK**

Operating Systems: **Windows, Linux (Ubuntu 16.04/18.04, Archlinux, Gentoo)**

ACHIEVEMENTS

1. Invited speaker in the **Rebellion and Disobedience in Artificial Intelligence (RaD-AI)** workshop in the **Autonomous Agents and Multi-Agent Systems (AAMAS) 2025** conference
2. Received a 1000€ grant by **INRIA** to participate in the **2024 SoRAIM Winter School** in Grenoble, France
3. Elected as **Program Representative for 2021-2023** in the Masters in Human-Computer Interaction
4. Received **Athena Pathways Scholarship for Women in STEM 2020** as a part of CMPT 419: Special Topics in Artificial Intelligence
5. Elected as Autonomy Team Lead in **Team Guardian Unmanned Aerial Vehicle SFU** to plan, execute, and mediate technical and administrative projects **2019 - 2020**
6. Elected as President of the **SFU Linguistics Student Union** to carry out planning and execution of various events, advocating for curriculum changes, and representing the undergraduate Linguistics student body **2018**

RELEVANT COURSES

Technical Sciences
Affective Computing, Analytical Logic, Artificial Intelligence, Calculus, Discrete Mathematics, Formal Methods, Functional Programming, Measuring and Analysing User Experience, Object Oriented Programming, Physics, Social Robotics and Human-Robot Interaction

Social Sciences
Cognitive Sciences, Conceptual Truths, Consciousness, Epistemology, Metaphysics, Philosophy of Mathematics, Philosophy of Science, Phonetics, Phonology, Psychology, Research Methods, Scientific Methods, Semantics, Syntax

MISCELLANEOUS

During my down-time, I like to play my electric bass guitar and write. In addition to English, I speak Spanish at a B1 level of fluency and thoroughly enjoy learning different languages. I also enjoy photography, crochet, and studying various areas of philosophy and mathematics in my spare time.

REFERENCES

Prof. Dr. Pınar Yolum
Professor in AI and Data Science at the Department of Information and Computing Sciences of Utrecht University
p.yolum@uu.nl

Dr. Pradeep K. Murukannaiah
Associate Professor in Interactive Intelligence at the Department of Intelligent Systems of Delft University of Technology
p.k.murukannaiah@tudelft.nl

Prof. Dr. Ginevra Castellano
Professor in Intelligent Interactive Systems at the Department of Information Technology of Uppsala University
ginevra.castellano@it.uu.se