

Curriculum Vitae



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Research Mission

My goal is to engineer **artificial systems that are creative** in their own right and in interaction with people. Moreover, I am interested in how creative AI is perceived by its users and the public, and how we can foster its adoption in the workplace and society. To this end, I conduct interdisciplinary, theoretical work and applied research in various creative domains such as videogames and design, bridging between AI, HCI, Psychology, Philosophy & Creative Practice.

Current Positions

Sep 2025 –	Aalto University, Espoo, Finland Academy Research Fellow PI of project ACAI: Autotelic Creative Artificial Intelligence. Competitive fellowship by the Research Council of Finland for early-career researchers on fast career tracks.
Apr 2022 –	Aalto University, Espoo, Finland Assistant Professor in Creative Technologies (Website) Tenure Track Assistant Professorship at the Department of Computer Science, fostering cross-school research on the subject of creative technologies. Lead of the Autotelic Interaction Research (AIR) Group PI in the Interactive AI Programme, Finnish Center for Artificial Intelligence (FCAI)
Nov 2020 –	Queen Mary, University of London, London, UK Visiting Research Fellow Ongoing collaboration with the Game AI Research Group and PhD co-supervision.

Previous Employment

Nov 2020 – Sep 2025	Aalto University, Espoo, Finland Academy of Finland Co-Funded Postdoctoral Researcher PI of project NEXT-IM: Next-Generation Computational Intrinsic Motivation.
May 2020 – Dec 2022	Institute for Molecular Medicine Finland (FIMM), University of Helsinki, Finland Visiting Researcher Collaboration with Dr Vilja Pietiäinen and Prof Peter Horvath at the High Content Imaging and Analysis Unit, integrating machine learning into an imaging-based SARS-CoV-2 serology test. Patent and Nature Communications submission under review.
May 2020 – Mar 2022	Aalto University, Espoo, Finland / Finnish Center for Artificial Intelligence (FCAI) Postdoctoral Researcher 3-year post-doc in the Academy of Finland Flagship Programme Finnish Center for Artificial Intelligence (FCAI). PIs: Prof Perttu Hämäläinen and Prof Antti Oulasvirta.
Sep 2014 – Sep 2016	Goldsmiths, University of London, UK PhD Researcher Research in the European Commission FP7 project “What-If-Machine” (WHIM, grant 611560), investigating computational imagination techniques across 5 sites.

May 2014 – Sep 2014 **Darmstadt University of Technology, Darmstadt, Germany**
 Student Research Assistant
 Design and implementation of a tool for the automatic evaluation of machine-learning experiments. In particular advising on appropriate statistical tests.

Jun 2011 – Dec 2013 **SAP SE Research, Darmstadt, Germany**
 Research- and Thesis Student
 UX design and development in project “Infostrom”, funded by the German Federal Ministry for Education and Research (grant 13N10711-15) and spanning 10 sites.

Education

2018–2020 **Queen Mary, University of London, London, UK (Game AI Research Group)**

2014–2018 **Goldsmiths, University of London, London, UK (Computational Creativity Group)**
Doctor of Philosophy (PhD)
 Thesis: Intrinsic Motivation in Computational Creativity Applied to Videogames
 Funding: Intelligent Games & Game Intelligence (IGGI) Doctoral Training Centre
 World-leading PhD programme targeting Games and Creative Industries.
 Access to a wide network of PhD students and industry partners.
 Supervision: Prof Simon Colton (Queen Mary / Monash University),
 Dr Jeremy Gow (Queen Mary), Prof Paul Cairns (University of York),
 Dr Christoph Salge (New York University / University of Hertfordshire)

2007–2014 **Johannes Gutenberg-University, Mainz, Germany**
Magister Artium (M.A., 1st class)
 Subjects: History of Art, Computer Science, Business
 Thesis: Design and Evaluation of Algorithms for the Creation of Novel and Unexpected Recommendations in Art Collections

Bachelor of Science (BSc, 1st class)
 Subject: Computer Science
 Thesis: Effects of Anticipation in Individually Motivated Behaviour on Survival and Control in a Multi-Agent Scenario with Resource Constraints
 In collaboration with the Adaptive Systems Research Group, University of Hertfordshire, UK. Published as journal article.

2010 – 2011 **University of Glasgow, Glasgow, UK (Study Abroad)**
 Subjects: Computer Science, Arts & Media Informatics, History of Art

Research Visits

Nov 2024 – Dec 2024 **Monash University, Melbourne, Australia**
 Visiting Researcher
 Visiting Prof Jon McCormack / Sensilab and Prof Alan Dorin / Collective Behaviour Lab at Monash University, Australia. Resulting in collaboration on project ACAI.

Nov 2022 – Dec 2022 **Crosslabs Tokyo/Kyoto & Okinawa Institute for Science and Technology, Japan**
 Visiting Researcher
 Visiting Dr Olaf Witkowski and Dr Martin Biehl at Crosslabs, Dr Nathaniel Virgo at the Earth Life Science Institute / Tokyo Tech, as well as Prof Takashi Ikegami and Prof Tom Froese at the Embodied Cognitive Science Unit / Okinawa Institute of Science and Technology. Funded by the Aalto CS Faculty Mobility Programme and resulting in ongoing research collaborations, organisational activities, and a visiting PhD student.

Oct 2019 – Oct 2019	University of Helsinki, Helsinki, Finland Visiting Researcher Funded collaboration with the Discovery Research Group led by Prof Hannu Toivonen. Resulting in a publication on integrating agency into a formal framework of creativity.
Apr 2018 – Jul 2018	Microsoft Research, Cambridge, UK Intern Working under Dr Katja Hoffman on intrinsically motivated, collaborative AI in Project Malmo, an AI experimentation platform built on top of the game Minecraft.
Jan 2018 – Apr 2018	New York University, New York City, US Visiting Researcher Funded collaboration with Prof Julian Togelius at NYU's Game Innovation Lab. Resulting in an award-winning paper on intrinsically motivated non-player characters.

Research Funding & Grants

Awarded 1.937m € external research funding in addition to internal and other funding initiatives.

2025 – 2029	4-Year Research Council of Finland Fellowship 1.145m € for research on Autotelic Creative Artificial Intelligence (ACAI, Decision No. 368430), including a budget for commissioning work and public exhibitions.
2025 – 2029	4-Year Research Grant by Jane & Aatos Erkko Foundation 540k € for research on Social Intrinsic Motivation (SIM, Decision No. 349036).
2024 – 2027	3-year PhD Grant by the Finnish Doctoral Training Programme in AI (AI-Doc) Supporting research on people's perception of creativity as exhibited by AI.
2023 – 2026	3-year Postdoc Grant by the Helsinki Institute for Information Technology (HIIT) Supporting postdoctoral research on artificial specific curiosity and creativity.
2022	Activity Funding by the Helsinki Institute of Information Technology (HIIT) 17.5k € for thesis work on people's perception of embodied AI image generation.
2022 – 2025	3-Year Academy of Finland Postdoctoral Research Grant 234.5k € for research on Next-Generation Computational Intrinsic Motivation (NEXT-IM, Decision No. 349036).
2020 – 2022	3-Year Postdoctoral Research Grant (transitioned early) Provided through the Academy of Finland Flagship Programme Finnish Center for Artificial Intelligence (FCAI) under the "Interactive AI" track.
2014 – 2018	4-Year Doctoral Research Grant Awarded by the Engineering and Physical Sciences Research Council (EPSRC) for research on Intelligent Games & Game Intelligence (IGGI).
2010 – 2013	3-Year Student Scholarship by the German Academic Scholarship Foundation The German Academic Scholarship Foundation is Germany's oldest, largest and most competitive sponsor of outstanding students (<0.5% of German students).
2010 – 2011	1-Year Exchange Scholarship by the German Academic Exchange Service Prestigious full stipend to study abroad in Glasgow by the world's largest funding organisation for the international exchange of students and researchers.

Research Output & Impact

I **publish at the leading venues** of AI, Human-Computer Interaction, Artificial Life, Psychology and Computational Creativity research, e.g. NeurIPS, TMLR, ACM CHI/CHI Play, UIST, IEEE CoG, ACM FDG, ALIFE, Motivation & Emotion, CogSci and the Int. Conf. on Computational Creativity. I also regularly get invited to prestigious events such as the **Dagstuhl** Seminars in Computer Science.

- Google Scholar author metrics: **h-index=18**, i10-index=25. Link: bit.ly/30C02qW.
- **47+ peer-reviewed scientific articles** across Human-Computer Interaction, (Game) AI, Artificial Life, Cognitive Science, Computational Creativity and Philosophy. One patent, another pending.
- Two **best paper awards**, two best paper honourable mentions (top 5% of accepted papers).
- Invited **research comments** in popular science media outlets such as IEEE Spectrum.
- Teaching gold-standard research methods, quality assurance and open science as part of the course "Research Methods: Foundations D" (Aalto CS-E5010) and implemented in own re-search, e.g. ethics pre-approval, study pre-registration and open code / datasets.
- Research prototypes at the **Espoo Museum of Modern Art** and **Dutch Design Week**.
- **Industry collaborations** with Splash Damage (UK), Rovio & Nextgames (Finland), and Tactile Games & Modl.AI (Denmark) yielding industry applications and top academic publications.

Research Supervision & Leadership Experience

- **Lead:** Autotelic Interaction Group, Aalto University. Link: <http://autotelic.science>
- **Postdoc Supervision:** Nadia Ady (Formerly University of Alberta; Artificial Curiosity).
- **PhD Supervision:** Daniel Carter (Intrinsic Motivation-Driven User Modelling), Erik Lintunen. (Next-Generation Computational Intrinsic Motivation), Niki Pennanen (Creative AI Perception).
- **PhD Co-Supervision:** Joel Oksanen (AI-assisted Design Research), Katri Manninen (Generative AI in Screenwriting). **Graduated:** Sebastian Berns (QMUL, London; Diversity in Generative ML).
- **Research assistants:** I regularly supervise research assistants, e.g. Niki Pennanen on people's perception of creativity in embodied AI (published in ACMT-HRI) and Alex Ternar on a qualitative research synthesis on the impact of GenAI on videogame production (in progress).
- **Bachelor and Master's theses:** I supervise a wide range of thesis projects at the intersection of HCI, AI, Games and creative practice. I particularly enjoy supervising students from different disciplines and across departments (e.g. Computer Science / Art & Media / Film, etc.)

Teaching Experience

Detailed portfolio available on request. I have taught Bachelor's, Master's and Doctoral level courses in various roles across two academic and national cultures, in the UK and in Finland. My teaching incorporates state-of-the-art research and strengthens students' intrinsic motivation, while respecting and accounting for differences between students from different schools and departments.

- Basic **pedagogical training** (Aalto PED-9011, 2022), training in Doctoral Supervision (Aalto PED-9009, 2023), and training in Course Design (Aalto PED-9009, 2023).
- **Developed and presently teaching** "Research Methods: Foundations D" (Aalto CS-E5010) and "Research Methods: AI-based Data Synthesis & Analysis D" (Aalto CS-E5012).
- **Taught** "Games User Research" (2021-, MSc, as lecturer), "AI for Media, Art & Design" (2021/22, MSc, lecturer) and the "Seminar on Computational Creativity" (2021; PhD and MSc; lecturer) at Aalto; "Game AI Programming" (2017; BSc; guest lecturer) and "Principles and Applications of Programming" (2016/17; BSc; teaching assistant) at Goldsmiths, University of London.

Grant Reviewer, Paper Reviewer & Programme Committee Roles

I serve on the **editorial boards and program committees** for the leading publishing venues of my field:

- Reviewing consortia grant proposals for the Austrian government (2025 WISS call) and the Dutch Research Council (2023).
- Associate Chair for ACM CHI Play (full papers, 2023) and CHI Play Work-In-Progress (2019-21).
- Reviewing (conferences), e.g. NeurIPS (2024-), IJCAI/ECAI (2023-), ACM CHI (2020-), ACM CHI Play (2017-), Siggraph (2023-), the Int. Conf. on Computational Creativity (2016-), and the IEEE Conf. on Games (COG, 2017-).
- Reviewing (journals), e.g. Artificial Life (MIT Press), Autonomous Agents & Multi-Agent Systems (Springer), Frontiers in Neurorobotics (Frontiers), IEEE Transactions on Games.

Positions of Trust

2025 – **Committee Member, Radical Creativity at Aalto University.**

2025 – **Committee Member, Ethics of AI in Research, Finnish National Board for Research Integrity (TENK).**

2024 – **Committee Member, AI Ethics Advisory Board, Finnish Center for AI (FCAI)**

2022 – **Committee Member, Art-Science Collaborations, Aalto University**

2022 – 2024 **Committee Member, Public Art Acquisitions, Aalto University**

2022 – 2023 **Publicity Chair for the International Conference on Computational Creativity**

2020 – 2021 **Co-Founder of the Computational Creativity Task Force**
Fostering the development of Computational Creativity as field and community. In collaboration with the Association of Computational Creativity steering committee.

2019 – 2021 **Publicity Chair for the Association for Computational Creativity**

2020 **Tutorial Chair for the International Conference on Computational Creativity**

Organisational Roles

2023 **Crosslabs Workshop: Creativity Unleashed (Tokyo, Japan / Online)**
Organised and lead a one-day session on: What is creativity, anyway?

2022 – **Creative Technologies Steering Committee at Aalto University**
Main activity: co-organising the Creative Technologies Seminar Series at Aalto.

2021 – **SIG “Modelling the Needs and Motivational Dynamics of Biological Agents”**
Main organiser of a special interest group (SIG) to investigate the computational modelling of the needs and motivations that guide the decision-making of humans specifically, and of living beings more generally. Hosted at Aalto, I bring together international speakers with an interdisciplinary audience from several Finnish universities.

2019 – **Generative Design in Minecraft (GDMC) Competition**
Acting as co-organiser to advance computational creativity through procedural content generation, computational storytelling and player experience modelling. We **bring together academics and the general public** to make a larger societal impact.

2019 **Tutorial on the Generative Design in Minecraft (GDMC) Competition**
Co-organised at the IEEE Conference on Games (COG).

2018 **First Workshop on Curiosity in Games**
Co-organised at the ACM Foundations of Digital Games conference (FDG).

Cybernetic Serendipity Reimagined Symposium
Co-organised at the Convention of the Society for the Study of Artificial Intelligence and the Simulation of Behaviour (AISB).

2017 **AISB Members Workshop VII – Serendipity Symposium**
Co-organised as independent event at St. Mary's University, London, UK.

2016 **First Tutorial on Intrinsic Motivation in General Game-Playing and NPCs**
Co-organised at the IEEE Conference on Computational Intelligence & Games (CIG).

Invited Talks, Panels & Research Meetings

2025	Workshop on Intrinsically Motivated, Open-Ended Learning (IMOL) Talk: Creativity & IMOL: Three Roads to Surprise Panel: Intrinsic Motivation and Open-Endedness: The Future of AI! The future of AI?
2025	Ethnographic Praxis in Industry Conference (EPIC) Panel: The New Truth Factory: When Insights Are Infinite, Who Decides What's Real?
2024	Dagstuhl Seminar: Computational Creativity for Game Development Research meeting
2024	Yle Journalist Academy (Helsinki, Finland) Talk on the Perception, Adoption, and Use of AI by Professional Creatives
	Crosslabs Workshop: Creativity Unleashed (Tokyo, Japan / Online) Talk on the Impact of Creative AI in Session "Impact & Interactions with Humans"
	Dagstuhl Research Meeting: Game Measures and Player Experience Talks: Playability Support for AI Authoring Tools; Responsible Game AI / HCI Research
2022	Workshop on Collective Intelligence in Living / Non-Living Populations Talk: Four Projects on Intrinsic Motivation, Embodiment, Creativity and Videogames Hosted by the Okinawa Institute for Science and Technology
	International Conference on Computational Creativity (ICCC) Panel: The Role of Embodiment in the Perception of Human and Artificial Creativity
2021	Aalto University Panel: CS Research Day – What is it like to be a Computer Science researcher?
2020	Centre for Doctoral Training in Intelligent Games & Game Intelligence (IGGI) Panel: Future Directions in Computational Creativity
2019	Aalto University (Visual Computing Seminar) Talk: Intrinsically Motivated Reinforcement Learning for Next-Gen Video Game AI
	Dagstuhl Seminar: Computational Creativity Meets Digital Literary Studies Talk: Does Intentionality Matter in Computational Storytelling?
	University of Helsinki Talk: Advancing Game AI Through Intrinsically Motivated Reinforcement Learning.
2018	Microsoft Research Cambridge Talk: Intrinsically Motivated Reinforcement Learning for Next-Gen Video Game AI
	New York University (Games Innovation Lab) Talk: Intrinsic Motivation in Games: Steering Character Behaviour & Player Modelling
2017	University of Sussex (Centre for Cognitive Science Research Seminar) Talk: Computational Creativity at the Edge of Being: Reconsidering Creativity and Intentional Agency in the Enactive AI Framework
	Enactive Seminars Online (ENSO) Seminar Talk: Investigating the Role of Empowerment Maximisation in Constitutive Autonomy, Adaptivity and Open-Ended Development
	University of Hertfordshire (Research in Adaptive Systems Group Seminar) Talk: Predicting Player Experience Without the Player. An Exploratory Study.
	Falmouth University (MetaMakers Institute) Talk: Intrinsic Motivation in Digital Games: From Steering Character Behaviour to Evaluating Game Content

International Conference on Computational Creativity

Panel: Computational Creativity and Discovery

2016**University of Hertfordshire (Research in Adaptive Systems Group Seminar)**

Talk: Collaboration in Co-Creative Scenarios via Coupled Empowerment Maximisation: A Case-Study in Video Games

Tungsten Centre for Intelligent Data Analytics

Talk: Does Empowerment Allow for Fully Enactive Artificial Agents?

Awards & Honours**2023****Best Paper Honourable Mention (CHI Play)**

Awarded for V. Vimpari, A. Kultima, P. Hämäläinen, and C. Guckelsberger. 2023. "An Adapt-or-Die Type of Situation": Perception, Adoption, and Use of Text-to-Image-Generation AI by Game Industry Professionals. Proc. ACM Hum.-Comput. Interact. 7, CHI PLAY, Article 379, 34 pages. Honourable mentions are given to the top 5% papers in the competition.

2021**Finalist in "AI Game Dev" Competition**

Europe's first research-driven competition to enhance game technology. Entered with our work published in S. Roohi, C. Guckelsberger, A. Relas, H. Heiskanen, J. Takatalo, and P. Hämäläinen. Predicting Game Engagement and Difficulty Using AI Players. Proc. of the ACM on Human-Computer Interaction, 5(CHI Play):1–18, 2021.

2020**Best Paper Award (International Conference on Computational Creativity)**

Awarded for S. Colton, A. Pease, C. Guckelsberger, J. McCormack, and M. T. Llano. On the Machine Condition and its Creative Expression. In Proc. Int. Conference on Computational Creativity (ICCC), pages 342–349, 2020.

2018**Best Paper Award (IEEE Conference on Computational Intelligence and Games)**

Awarded for C. Guckelsberger, C. Salge, and J. Togelius. New And Surprising Ways to be Mean: Adversarial NPCs with Coupled Empowerment Minimisation. In Proc. Conference on Computational Intelligence and Games (CIG), pages 1–8. IEEE, 2018.

2018**Finalist in "Creative Computing for the Digital Economy" Competition**

A category in the UK-wide "Connected Nations Pioneers" competition, hosted by the EPSRC to recognise exceptional postgraduate research contributions. Awarded for my work on intrinsically motivated non-player characters for next-gen game AI.

2017**Best Paper Honourable Mention (CHI Play)**

Awarded for C. Guckelsberger, C. Salge, J. Gow, and P. A. Cairns. Predicting Player Experience Without the Player. An Exploratory Study. In Proc. SIGCHI Annual Symposium on Computer-Human Interaction in Play (CHI Play), pages 305–315. ACM, 2017. Honourable mentions are given to the top 5% papers in the competition.

2014**Prize for an Outstanding Magister Thesis**

Awarded by the Johannes Gutenberg-University Mainz, Germany.

2013**Prize for an Outstanding BSc Thesis**

Awarded by the Johannes Gutenberg-University Mainz, Germany.

Language Skills (CEFR Self-Assessment)

- German: native
- English: C2 (understanding, speaking, writing)
- French: B1 (understanding, speaking, writing)
- Finnish: A2 (understanding), A2 (speaking, writing)