

Johan Ahlm Michalove

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Current Position

2021–Present **PhD Candidate**, *Information Science*, Cornell University, Ithaca, NY

Education

2021–Present **PhD, Information Science**, *Cornell University*, Ithaca, NY

Committee: Malte Jung, Steve Jackson, Chris Csíkszentmihályi

2021–2025 **MS, Information Science**, *Cornell University*, Ithaca, NY

2018–2019 **MS, Computer Science**, *University of Washington*, Seattle, WA

Advisor: Boeing Endowed Professor Siddhartha Srinivasa

Thesis: *Model Predictive Control Under State Uncertainty*

2013–2018 **BS, Computer Science with Honors, Cum Laude**, *University of Washington*, Seattle, WA

Focus: Robotics, Machine Learning, and CS Education

2013–2018 **BA, Philosophy with Honors, Cum Laude**, *University of Washington*, Seattle, WA

Focus: Epistemology and Philosophy of Science

Exhibitions & Installations

February 2026 **The Divinity Trilogy**

Three single-channel videos presenting 1,358 figures across six millennia of recorded history. Each face algorithmically keystoned to the Renaissance golden section, arranged in a Zipfian temporal distribution that compresses time as it approaches the present.

February 2026 **Money Machines**, Shutter Gallery, Manhattan NY

Mixed media conceptual art, collage on canvas. Group show curated by Katya Austin.

January 2026 **Cache Machine**, *With Ben Shirken*, KAJE Brooklyn, NY

A durational AV sound art installation. An assemblage of curated components that generate, delete, overwrite, denoise, renoise, block, amplify, and spatialize—a set of computational moves choreographed into a generative soundscape. Software architecture, FSA viewers, interactive website, and mechatronic implementation by Johan Michalove. Curatorial concept with Ben Shirken.

April 2025 **H.D. Reliquary**, *With Studio ZM, Muein, and Duncan Davies*, Intercomm, Queens NY, Technical Lead

A multimedia installation by Ben Shirken reimagining the hard drive as a secular-sacred vessel of archival shrapnel. Developed a real-time MRI/CT scan viewer that deconstructs objects into algorithmic volumetric slices, projected onto acrylic panels and synchronized with laser projection and an 8-channel speaker array.

Research and Work Experience

2026– **Founder**, *Silver*, NYC

2025– **Founder**, *Resonant Networks*, NYC

Developed a series of consumer AI products, including BullClip.io, LifeBook.day, and Silver.is. Built using Next.js, Supabase and Prisma, Google GCP, AWS, Vercel, Anthropic, and OpenAI APIs.

2025– **Founder and Lead Developer**, *Mutua*, NYC

Developing mutual aid systems like FireAid.info, that served nearly 200,000 people during the LA fires. Tech stack includes Next.js, Vite, TypeScript, Postgres, Leaflet, Redis, and the Google Maps, Stadia, Anthropic, and OpenAI APIs.

2025– **Founding Partner**, *Zangs Michalove Studio*, NYC

Co-founded information design studio focusing on full stack web development, design, and exhibition design.

2024– **Research Assistant**, *Computing on Earth Lab and Interplay Research Studio*, Cornell University

- 2022–2023 **Editorial Coordinator**, *Who Are We Now?* by Blaise Agüera y Arcas
Working with the author and a design team to produce a print and web book. Responsibilities included editing, data curation, archival research, copyright permissions, managing references, and creating a back-end infrastructure for web and print-based text assets.
- 2021–Present **Graduate Teaching Assistant**, *Information Science*, Cornell University, Ithaca, NY
Assisted with course design and operations of undergraduate and graduate-level courses, such as Re-designing Robots and Data Analytics for Information Science.
- 2019–2021 **Researcher**, *Autonomy, Agency, and Assurance Institute*, Australian National University, Canberra, Australia
Served as faculty on an experimental master's program, co-designing a transdisciplinary curriculum. Led the creation and delivery of teaching materials for year-long lab course. Conducted research in partnership with Australia's largest employer to create process and governance recommendations related to ML fairness.
- 2019 **Temporary Staff Helper – Curriculum Development**, *Paul G. Allen School of Computer Science & Engineering*, University of Washington, Seattle, WA
Created and taught the course Ethical Automation to CS undergraduates. Co-developed instructional material for Computer Ethics, an undergraduate ethics course.
- 2018–2019 **Research Assistant**, *Personal Robotics Lab*, University of Washington, Seattle, WA
Launched the Multi-Agent System for Non-Holonomic Racing (mushr.io) program, an open source robotics platform and fleet of autonomous vehicles used for education and research, together with Prof. Siddhartha Srinivasa and Dr. Sanjiban Choudhury. Since the release, MuSHR has supported research in leading robotics conferences, and been built by students, researchers and makers internationally.
- 2017 **Summer Intern**, *NASA Jet Propulsion Laboratory*, Pasadena, CA
Designed and developed test framework for Robot Operational and Computational Service (ROCS) to support Mars 2020 rover surface operations using AWS and Docker.
- 2016–2017 **Research Assistant**, *Robotics and State Estimation Lab*, University of Washington, Seattle, WA
Worked in a two-person team with Prof. Dieter Fox to prototype the hardware and software of a 10th scale robotic RC car, predecessor to the MuSHR platform.
- 2015–2016 **Teaching Assistant**, *Paul G. Allen School of Computer Science & Engineering*, University of Washington, Seattle, WA
Built first ever automated Induction Tutor for inductive proofs using Node.js and SageMath. Components in active use at UW and Caltech. Taught in Foundations of Computing I and Data Structures and Parallelism.
- 2013–2017 **Tutor**, *Mighty Oak Tutoring*, Seattle, WA
Specialized instruction for high-school students with learning differences, such as ADD, ADHD, Test Anxiety, and Dysgraphia.

Teaching

- 2024 **Teams and Technology**, *Information Science*, Cornell University
Graduate teaching assistant for Malte Jung.
- 2023 **Data Analytics for Information Science**, *Information Science*, Cornell University
Graduate teaching assistant for Paul Ginsparg.
- 2021 **Re-Designing Robots**, *Information Science*, Cornell University
Graduate teaching assistant for Malte Jung.
- 2020 **Building Cyber-Physical Systems**, *3A Institute*, Australian National University
Led development and delivery of 6-week Machine Learning series. Successfully transitioned to online-learning during COVID-19.
- 2020 **Cybernetics Practice**, *3A Institute*, Australian National University
Tutor, lecturer, and project mentor of semester-long course on Applied Cybernetics.
- 2019 **Intelligent Machinery, Identity and Ethics**, University of Washington
Teaching assistant for Blaise Agüera y Arcas. Organized guest lectures for Dr. Genevieve Bell and Dr. Patricia Churchland.
- 2019 **Ethical Automation**, University of Washington
Designed and taught senior-division undergraduate course on ethics and automation.
- 2018 **Intelligent Machinery, Identity and Ethics**, University of Washington
Teaching assistant for Blaise Agüera y Arcas and Prof. Adrienne Fairhall.

- 2017 **Data Structures and Parallelism**, University of Washington
Teaching assistant for Adam Blank.
- 2016 **Foundations of Computing I**, University of Washington
Teaching assistant for Adam Blank.

Awards and Fellowships

- 2024 **SOAM Residency**, *Summer residency investigating Network Sovereignities*.
- 2022 **Dweb Fellow**, *Dweb Camp, hosted by the Internet Archive*.
- 2022 **Research Fellow**, *The Terraforming Design Research Programme, Strelka Institute for Media, Architecture and Design, Moscow*.
- 2020 **Engaged Educator**, *Special Commendation, College of Engineering and Computer Science Remote Teaching Awards, ANU*.
- 2018 **Outstanding Graduating Senior**, *Department of Philosophy, University of Washington*.
- 2017 **Outstanding Undergraduate Scholar**, *Department of Philosophy, University of Washington*.
- 2016 **Phi Beta Kappa**

Invited Talks

- 2025 **Mythologies for a Spiritually Void Time**, *Offline Gallery*
Panel host for group show featuring approximately a dozen artists.
- 2025 **FireAid**, *Chinatown.js*, New York City, NY
- 2022 **Institutional Obsolescence**, *Dweb Camp*, Mendocino Coast, CA
- 2020 **Data, AI, and National Security**, *National Security College*, Canberra, Australia
Guest lecture to executive civil servants of Australia's national security community.
- 2019 **Values and Technology**, *University of Washington*, Seattle, WA
Guest lecturer in undergraduate course Computer Science Principles.
- 2018 **Society, Ethics, Computing**, *University of Washington*, Seattle, WA
Seminar for Direct Admit Freshmen to the Computer Science program.

Selected Projects

- 2025 **LifeBook.day**
A guidebook to life. Runs on Vercel, using the Anthropic and Met APIs.
- 2025 **Silver.is**
An AI assistant that reads your notes. Uses the Google Drive and Anthropic APIs with a custom indexer.
- 2025 **BullClip.io**
An online video clipping service using FFmpeg, Vercel, and GCP.
- 2025 **Puul.se**, *mutual aid tech*
AI service to turn political sentiments into an actionable curriculum.
- 2025 **FedAid.info**, *mutual aid tech*
AI service to help public servants report their 5 achievements to OPM.
- 2025 **NeedMatch.net**, *mutual aid tech*
Next-gen mutual aid exchange platform.
- 2025 **FireAid.info**, *mutual aid tech*
Mutual aid map of Los Angeles that served nearly 200,000 unique visitors during the LA Fires.
- 2025 **Dora.nyc**, *mutual aid tech*
Mutual aid map of NYC, built with a team of stakeholders and activists.
- 2024–2025 **BeyondGPT.pro**
A marketplace for AI code validation, built with React, Firebase, and Stripe.
- 2024–2025 **Resonet**
A neuromorphic social media app built on React Native and Firebase.

- 2024 **Semioscape.org**
Interactive concept cartographer using Claude 3.5 Sonnet to generate associations.
- 2024 **People's Voice**
LLM-powered tool to analyze New York Times comments related to the 2024 election.
- 2024–2025 **Editorial Coordinator**, *What is intelligence?* by Blaise Agüera y Arcas, MIT Press
- 2024–2025 **Constellations**, johan.pages.dev
Web, image, and text-based project exploring Walter Benjamin's notion of spielraum (room for play).
- 2023– **Ordinary and Planetary Algorithms**, Cornell
- 2022–2023 **Editorial Coordinator**, *Who Are We Now?* by Blaise Agüera y Arcas, Hat & Beard Press
- 2023 **Reviewer**, *The Birth and Rebirth of AI* by Blaise Agüera y Arcas, MIT Press
- 2023 **Creative Director**, *The Strength of the Illusion, A Novel* by Jared Moore, Ergal Press
- 2022 **Strategy Consulting**, *Design Research*
Re:Arc, Space10.
- 2022 **Productive City Hair Care**, *Speculative Metabolics*
6th Tallinn Architecture Biennale.
- 2020 **Tracing a Data Life Cycle**, *Applied Cybernetics*
Tutorial at the EPIC2020 Conference.
- 2019 **Auditing a Feral Recommendation System**
Algorithmic auditing methodology for YouTube. Over 5m videos and 12m recommendations analyzed.
- 2018–2020 **MuSHR**, *Open Source Autonomous Race Car*, mushr.io
Co-founded low-cost autonomous RC car platform. Used by researchers and makers worldwide.
- 2018 **Mechatronic Art**
Acrylic sculptures and panels via procedural art and laser-cutting. Independent study with Prof. Afroditi Psarra.
- 2017 **DubCar**
Autonomous RC car on Nvidia Jetson TX1. Overseen by Prof. Dieter Fox.
- 2016 **Induction Tutor**
Automated feedback for inductive proofs using Node.js and SageMath. Derivatives used at UW and Caltech.

Publications

- 2019 Srinivasa, S.S., Lancaster, P., Michalove, J., Schmittle, M., Summers, C., Rockett, M., Smith, J.R., Choudhury, S., Mavrogiannis, C., Sadeghi, F.. *MuSHR: A Low-Cost, Open-Source Robotic Racecar for Education and Research*. arXiv e-prints, 2019. arXiv:1908.08031.

Skills

- Methods Design, Data Analytics, Control Systems, Localization, Soldering, Rapid Prototyping, Systems Dynamics, Systems Thinking, Prompt Engineering, Value Sensitive Design, STPA, Course Design, Speculative Fiction, Teaching, Ethnographic Interviewing, Ethnographic Field Notes, Research Ethics (IRB), Beekeeping, Turntablism
- Languages C, C++, Python, Java, JavaScript ES6, TypeScript, Ruby, HTML, CSS, Spanish, Danish, English
- Libraries & Tools PyTorch, NumPy, Pandas, scikit-learn, Tableau, D3.js, ROS, OpenCV, Gazebo, Node.js, Next.js, Vite, React, React Native, Rails, Spark, SQL, PostgreSQL, Firebase, Supabase, GCP, AWS S3 and CloudFront, Terraform, Anthropic API, OpenAI API, Google Drive API, Google Maps API, Discord API, Leaflet, Redis, Vercel
- AI Systems Cursor, Claude, Gemini, ChatGPT, DeepSeek, Midjourney, Huggingface

Leadership and Service

- 2021–2024 **Graduate Student Representative**, *Broadening Participation in Information Science Committee, Cornell University*
- 2017 **Chair**, *University of Washington chapter of Association for Computing Machinery*
Organized and taught weekly Interview Prep course to over 70 students. Managed team of 7 officers.

2016 **Vice-Chair**, *University of Washington chapter of Association for Computing Machinery*
Maintained and improved student store Snack Overflow, serving low-cost snacks to undergraduate Computer Science students.