

James Ryan

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I build abstractions, tools, and languages to help humans (and machines) author, control, and understand AI systems.

Education

- 2013–2018 **Ph.D.**, *University of California, Santa Cruz.*
Computational Media
Thesis: *Curating Simulated Storyworlds*
- 2013–2016 **M.S.**, *University of California, Santa Cruz.*
Computer Science
- 2011–2013 **M.S.**, *University of Minnesota.*
Health Informatics (minor: Cognitive Science)
- 2009–2011 **B.A.**, *University of Minnesota.*
Linguistics

Experience

- 2025–curr **Principal**, *Sifty*.
I operate Sifty, a software studio specializing in controllable AI systems for art and entertainment. Sifty recently released a first product in public beta: Viv, a licensable narrative engine for games and simulations centered on a custom programming language. Viv is based on my thesis research, represents five years of development, and is being piloted by an award-winning game studio. It subsumes a compiler, runtime, plugins (Claude Code, JetBrains, VS Code, Sublime Text), and an extensive docs site, all under CI/CD. Its packages are published on PyPI, npm, and various marketplaces. I am also training a Viv-specialized coding assistant (merged LoRA adapters via DAPT, SFT, and RLVR). The entire Viv codebase is source-available [here](#).
- 2024–2025 **Head of AI**, *mPath AI*.
Sole developer of the AI engine and monitoring dashboard for an overwhelm-support platform that leveraged the know-how of experienced life coaches. Cofounder was the former COO of Headspace. Built and deployed across the full MERN stack; tech was active in a shipped mobile app (iOS/Android).
- 2022–2024 **Narrative Systems Lead**, *Hexagram*.
Led a team of authors and engineers building next-generation story engines for videogames and other interactive media. Work combined symbolic AI and generative AI with an emphasis on authorial control, spanning many client deliveries across entertainment and other sectors.

2020–2022 **Visiting Assistant Professor**, *Carleton College*.

Full-time instructor in the Computer Science department. Carleton is consistently ranked #1 nationally by U.S. News for undergraduate teaching. Taught (and in multiple cases designed): Programming Languages, Natural Language Processing, Computability and Complexity, Introduction to Computer Science, and Computational Media. Advised student research projects.

2018–2021 **Research Scientist**, *BBN Technologies*.

Principal investigator on a \$7M multi-year DARPA project centering on a conversational AI system that engages with email scammers to waste their time. Our approach integrated techniques from both symbolic AI and then-nascent LLMs, with a content orientation based on *quests* that the system assigned to the scammer. We also built an authoring tool aimed at non-programmers.

Languages and Frameworks

Languages TypeScript and Python (primary). Working knowledge of several other languages. Also created my own programming language, Viv.

Frameworks MongoDB, Express, React, Node, Redis, Flask, Docker, AWS, Google Cloud, GitHub Actions, Astro, PyTorch, HuggingFace Transformers, Claude Code, Vellum, Pinecone, ElevenLabs, etc.

Publications

Full All 50+ peer-reviewed publications available on my website.

Selected J. Ryan. “Curating Simulated Storyworlds.” *Ph.D. dissertation, University of California, Santa Cruz*, 2018.

J. Ryan. “Grimes’ Fairy Tales: A 1960s Story Generator.” *International Conference on Interactive Digital Storytelling*, 2017.

J. Ryan, M. Mateas, and N. Wardrip-Fruin. “Open Design Challenges for Interactive Emergent Narrative.” *International Conference on Interactive Digital Storytelling*, 2015.

J. Ryan, E. Kaltman, M. Mateas, and N. Wardrip-Fruin. “What We Talk About When We Talk About Games: Bottom-Up Game Studies Using Natural Language Processing.” *International Conference on the Foundations of Digital Games*, 2015.