

# Jack Kelly

**Email:** jochkell@ucsc.edu

**Phone:** (860) 918-8146

**GitHub:** <https://github.com/jackckelly>

**LinkedIn:** <https://www.linkedin.com/in/jackkelly3>

**Research interests** Social simulation, game NPCs, game studies, authoring tools, language models

**Education**

**University of California, Santa Cruz** Santa Cruz, CA  
Ph.D. in Computational Media September 2024 – June 2029  
*Advised by Elin Carstensdottir*  
M.S. in Computational Media September 2022 – August 2024  
*Advised by Michael Mateas and Noah Wardrip-Fruin*

**Brown University** Providence, RI  
B.S. in Computer Science September 2014 – May 2018

**Awards and honors**

Best Paper, AIIDE 2023  
Best Paper, FDG 2023

**Conference papers**

**There and Back Again: Extracting Formal Domains for Controllable Neurosymbolic Story Authoring**  
Jack Kelly, Alex Calderwood, Noah Wardrip-Fruin, Michael Mateas.  
**AIIDE 2023. 28% acceptance. Best Paper.**  
<https://doi.org/10.1609/aiide.v19i1.27502>

**Shoelace: A Storytelling Assistant for GUMSHOE One-2-One**  
Devi Acharya, Jack Kelly, William Tate, Maxwell Joslyn, Michael Mateas, Noah Wardrip-Fruin.  
**FDG 2023. 39% acceptance. Best Paper.**  
<https://doi.org/10.1145/3582437.3582475>

**Workshop papers**

**Paradise: An Experiment Extending the Ensemble Social Physics Engine with Language Models**  
Jack Kelly, Michael Mateas, Noah Wardrip-Fruin.  
<https://doi.org/10.1145/3649921.3659841>  
**FDG 2024. Workshop on Game Research Software System Reuse**

**Towards Computational Support with Language Models for TTRPG Game Masters**  
Jack Kelly, Michael Mateas, Noah Wardrip-Fruin.  
**FDG 2023. Workshop on Human-AI Interaction Through Play.**  
<https://doi.org/10.1145/3582437.3587202>

## Service and teaching

### Teaching Assistantships

CMPM 170, <i>Rapid Prototyping</i>	Fall 2025
CMPM 176, <i>Game Systems</i>	Spring 2025
CMPM 80K, <i>Foundations of Interactive Game Design</i>	Summer 2024
CMPM 80K, <i>Foundations of Interactive Game Design</i>	Winter 2024
CSCI 1570, <i>Design and Analysis of Algorithms</i>	Fall 2017
CSCI 1951A, <i>Data Science</i>	Spring 2017

### Peer Review

CHI	2026
CHI Play	2025
AIIDE	2023-2025
ICIDS	2024-2025
Wordplay	2024

## Industry experience

**Transform** (acquired by dbt Labs) Seattle, WA

Data Engineer January 2022 – December 2022

- Worked across data infrastructure to integrate Transform’s centralized metrics store (now the dbt Semantic Layer) with upstream data sources (Snowflake, BigQuery, Redshift) and downstream consumers (Slack, Google Sheets, Excel).

**Yelp** San Francisco, CA

Machine Learning Engineer August 2018 – December 2020

- On the Contribution Targeting team, developed and launched a new visit attribution model with PySpark and XGBoost using website and app interaction data; increased business reviews by 2% sitewide upon integration with the review suggestion system.
- On the Data Quality team, rebuilt Yelp’s chain business identification system to use human-in-the-loop feedback, resolving persistent data quality issues.

## Programming languages

Proficient: Python, Javascript, Typescript.

Familiar : C#, Java, R.