Jack Kelly

Email: jochkell@ucsc.edu   **GitHub**: https://github.com/jackckelly
Phone: (860) 918-8146   **LinkedIn**: https://www.linkedin.com/in/jackkelly3

Research interests	Automated game design, social simulation, authoring tools, language models

Education

University of California, Santa Cruz	Santa Cruz, CA
Ph.D. in Computational Media	September 2024 – December 2028
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

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

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.

Service and teaching

Teaching Assistantships

CMPM 176, *Game Systems*	Spring 2025
CMPM 80K, *Foundations of Interactive Game Design*	Summer 2024
CMPM 80K, *Foundations of Interactive Game Design*	Winter 2024
CSCI 1570, *Design and Analysis of Algorithms*	Fall 2017
CSCI 1951A, *Data Science*	Spring 2017

Peer Review

AIIDE	2023, 2024, 2025
ICIDS	2024, 2025
Wordplay	2024

Programming languages

Proficient: Python, Javascript/Typescript.
Familiar : C#, Java, R.