Jack Kelly

Email: jochkell@ucsc.edu GitHub: https://github.com/jackckelly

Phone: (860) 918-8146 LinkedIn: https://www.linkedin.com/in/jackkelly3

Research interests Game design, social simulation, authoring tools, language models

Education University of California, Santa Cruz Santa Cruz, CA

M.S. in Computational Media September 2022 – August 2024

Advised by Michael Mateas and Noah Wardrip-Fruin

GPA: 4.0

Brown University Providence, RI

B.S. in Computer Science September 2014 – May 2018

Awards and Best Paper, AIIDE 2023 honors Best Paper, FDG 2023

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 En-

gine with Language Models

Jack Kelly, Michael Mateas, Noah Wardrip-Fruin.

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

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 80K, Foundations of Interactive Game Design	2024
CSCI 1570, Design and Analysis of Algorithms	2017
CSCI 1951A, Data Science	2017

Peer Review

AIIDE 2023

Programming languages

Proficient: Python, Javascript/Typescript.

Familiar : C#, Java, R.