

# Jack Kelly

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Research interests	Automated game design, social simulation, authoring tools, language models	
Education	<b>University of California, Santa Cruz</b>	Santa Cruz, CA
	Ph.D. in Computational Media	September 2024 – December 2028
	<i>Advised by Elin Carstensdottir</i>	
	M.S. in Computational Media	September 2022 – August 2024
	<i>Advised by Michael Mateas and Noah Wardrip-Fruin</i>	
	<b>Brown University</b>	Providence, RI
	B.S. in Computer Science	September 2014 – May 2018
Awards and honors	Best Paper, AIIDE	2023
	Best Paper, FDG	2023
Conference papers	<b>There and Back Again: Extracting Formal Domains for Controllable Neurosymbolic Story Authoring</b>	
	Jack Kelly, Alex Calderwood, Noah Wardrip-Fruin, Michael Mateas.	
	<b>AIIDE 2023. 28% acceptance. Best Paper.</b>	
	<a href="https://doi.org/10.1609/aiide.v19i1.27502">https://doi.org/10.1609/aiide.v19i1.27502</a>	
	<b>Shoelace: A Storytelling Assistant for GUMSHOE One-2-One</b>	
	Devi Acharya, Jack Kelly, William Tate, Maxwell Joslyn, Michael Mateas, Noah Wardrip-Fruin.	
	<b>FDG 2023. 39% acceptance. Best Paper.</b>	
	<a href="https://doi.org/10.1145/3582437.3582475">https://doi.org/10.1145/3582437.3582475</a>	
Workshop papers	<b>Paradise: An Experiment Extending the Ensemble Social Physics Engine with Language Models</b>	
	Jack Kelly, Michael Mateas, Noah Wardrip-Fruin.	
	<a href="https://doi.org/10.1145/3649921.3659841">https://doi.org/10.1145/3649921.3659841</a>	
	<b>FDG 2024. Workshop on Game Research Software System Reuse</b>	
	<b>Towards Computational Support with Language Models for TTRPG Game Masters</b>	
	Jack Kelly, Michael Mateas, Noah Wardrip-Fruin.	
	<b>FDG 2023. Workshop on Human-AI Interaction Through Play.</b>	
	<a href="https://doi.org/10.1145/3582437.3587202">https://doi.org/10.1145/3582437.3587202</a>	

Industry experience	<b>Transform</b> (acquired by dbt Labs)	Seattle, WA
	Data Engineer	January 2022 – December 2022
	<ul style="list-style-type: none"> <li>• 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).</li> </ul>	
	<b>Yelp</b>	San Francisco, CA
	Machine Learning Engineer	August 2018 – December 2020
	<ul style="list-style-type: none"> <li>• 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.</li> <li>• On the Data Quality team, rebuilt Yelp’s chain business identification system to use human-in-the-loop feedback, resolving persistent data quality issues.</li> </ul>	
Service and teaching	<b>Teaching Assistantships</b>	
	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
	<b>Peer Review</b>	
	AIIDE	2023, 2024
	ICIDS	2024
	Wordplay	2024
Programming languages	Proficient: Python, Javascript/Typescript.	
	Familiar : C#, Java, R.	