

# Asiiah Song

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I'm interested in computational creativity and intelligent agents.

## Education

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- **University of California, Santa Cruz** **Santa Cruz, CA**  
*PhD, Computational Media* 2018–present
- **University of British Columbia** **Vancouver, BC, Canada**  
*MSc, Computer Science* 2018
- **University of California, Santa Cruz** **Santa Cruz, CA**  
*BA, Computer Science, Linguistics* 2015

## Employment

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- **University of California, Santa Cruz** **Santa Cruz, CA**  
*Graduate Student Researcher* July 2018–present  
  
*Graduate Teaching Assistant* July 2018–present  
  
*Science Internship Program Mentor* June 2019–August 2019
- **University of British Columbia** **Vancouver, BC, Canada**  
*Graduate Teaching Assistant* Sept 2016 - May 2018
- **TRAC Labs** **Houston, TX; remote**  
*Software Engineer* July 2015–July 2018  
Maintenance and development of a web app in JavaScript and a desktop application in Java, both part of a human-assisted automation toolkit (PRIDE) used in industrial automation and various scientific research projects.

## Projects

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- **Road network generator**  
Town-Sim simulates the growth of an urban settlement from a seed of initial settlers. The traffic pattern of the simulated agents moving across the map gathering resources motivate the construction of roads in the simulation. *Paper published at the PCG (Procedural Content Generation) Workshop at FDG (Foundation of Digital Games) 2019.*
- **Recipe generator**  
3T uses SpaCy to process the Recipe1M+ dataset, and keras to evaluate the fitness on an evolutionary algorithm. 3T represents recipes as trees and emphasizes heat as an atomic element. 3T aims to automatically generate novel (differentiated from training set), full (with ingredients and instructions) recipes.
- **Card deck generator**  
Generative Tarot is a concept piece that scrapes the internet for keywords that represent themes of what people are thinking. A small knowledge graph is generated from those keywords and is then projected into

the resulting generated Tarot deck. *Workshop paper accepted (2019).*

## **Skills**.....

- **Programming Languages:** Python, JavaScript, C#, C++, Java
- **Tools:** Node.js, SpaCy, keras, Unity3D Game Engine
- **Other:** Computational Creativity, Procedural Content Generation, Machine Learning, Evolutionary Algorithms