

# Rodrigo H. Morais

## Contact

<https://rmorais.itch.io>   <https://linkedin.com/in/RodrigoHMorais>  
[rmoraisu@proton.me](mailto:rmoraisu@proton.me)   <https://github.com/rodigu>

## Education

PhD in Informatics, University of Illinois   2022 ~ Today

## Professional and Research Experience

*Information Science Teaching Assistant at UIUC*   August 2022 ~ Today

- Taught 2 discussion sessions, 60 students in total
- Graded assignments

*Mathematics Research Assistant at Soka University*   Sept 2021 ~ May 2022

- R.A. for Katherine Perry, professor of Mathematics
- Designed algorithms for market networks
- Research Network algorithms and cycle enumerating optimizations

*Physics Research Assistant Fall at Soka University*   Oct 2021 ~ May 2022

- R.A. for Phat Vu, professor of Physics
- Research digital simulation methods and software
- Create Python notebooks on modeling and simulations
- Hold Python tutoring hours for students

*Software Developer at PushStart*   Mar 2021 ~ Jun 2021

- Junior JavaScript developer
- Analyzed and implemented design documents for web games
- Used Git, Slack and Jira to coordinate with team, and PIXIjs, GSAP, Yarn and JavaScript to develop web applications

*Writing Center Research Assistant Fall*   Fall 2019 ~ Spring 2020

- R.A. for the Director of the Writing Center at Soka University
- Conducted academic research on alternative housing in Orange County
- Developed academic website with WordPress: [kristiwillsonphd.com](http://kristiwillsonphd.com)

## Additional Experience

*DS4A Fellow Spring 2021*   Spring 2021 ~ Summer 2021

- Awarded merit-based fellowship to highly selective (4% acceptance rate) Data Science program with Harvard Professor Natesh Pillai
- Nominated a SoftBank Endowed Scholar based on outstanding work and noteworthy professional promise

*Network Science Library*   Spring 2020

- Wrote the first general-purpose Network Science library for Deno in TypeScript
- Implemented breadth first search, clustering, closeness centrality, assortativity and other graph data structure algorithms
- <https://deno.land/x/nets@v0.4.8>

*Network Visualization Tools*   Sprint 2020

- Visualization apps that demonstrate uses for the network2020 library
- Chirp-firing game: <https://rmorais.itch.io/a-monstrous-constellation>
- NetworkX graph generator: <https://github.com/rodigu/nxtool>

*Email Automation Bot*   Summer 2020

- Built a fully automated bot for email handling and database reading/writing
- Automated emailing at non-profit project created by students of color
- Fundraising saw significant gains when the bot was deployed
- Used the Mailchimp API and the Google Drive API

