Rodrigo H. Morais

Contact

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Education

PhD in Informatics, University of Illinois at Urbana-Champaign	Expected Graduation: 2027

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: kristiwilsonphd.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-constelation
- 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