

Education

Rice University

2017 - present
Houston, TX

- BS Computer Science & BA Cognitive Science, graduating May 2021, GPA: 3.40

Westwood High School

2013 - 2017
Austin, TX

- GPA: 4.0/4.0 (5.58/5.0 weighted), National Merit Scholar, Graduated May 2017

Work Experience

OpenStax - Education Tech

Software Engineering Intern

Summer 2019
Houston, TX

- OpenStax Biglearn backend development intern

Rice University, Dept. of Computer Science

Teaching Assistant

2019-present
Houston, TX

- COMP 382 Reasoning about Algos: Office hours, lead discussion of lab problems, homeworks

UT Austin, College of Natural Sciences, Vertebrate Interactome Lab

Summer Research Intern

2016
Austin, TX

- DNA recombineering of DHX35 gene in E. coli, and computational Flux Balance Analysis on cyanobacteria

Conference Presentations

PyoFuel: Using Python and Pathway Tools to engineer synthetic biofuel

Sole Author

[more](#)

Dec 2016
Colorado

- Int'l. Soc. for Computational Biology / 2016 Rocky Mountain Bioinformatics Conference (poster session)

Software Development Skills

Programming Languages & Frameworks

2013 - present

- Proficient: Python, Java, ReasonML/OCaml, React
- Basic: Git, Linux, Elm, C, Racket, Pyret, Html, Hasura's Postgres + GraphQL

Software Design and Test

2013 - present

- Systematic Program Design - Designing Data & Functions, EdX course based on HtDP2
- Typed functional programming (Java 8+, Python 3.5+, ReasonML/OCaml), Object-Oriented Design
- Test-driven development, unit & property-based tests, Python: Pytest, Java: JUnit 5 & QuickTheories

Projects

Lentil - A Web-Based Musician's Feedback Service

Independent Project

[repo](#)

[demo](#)

2018 - present

- Musicians submit performances and receive pointed feedback from others (ReasonML, React, Postgres)

Physics Sunset

Independent Project

[repo](#)

[demo](#)

2017

- Design and implement a browser-based interactive graphical simulation of a physics problem (ReasonML)

Disease Transmission Analysis from Outbreak Data

2018

- Infer disease transmission tree from disease outbreak genetic + epidemiological data using RDMST (Python)

DNA Sequence Alignment

2018

- Design and implement dynamic programming solutions to DNA sequence alignment problems (Python)
- Align human and fruit-fly protein sequences to identify the PAX domain within the "eyeless" gene

Phylogenetic (Evolutionary) Trees

2018

- Infer evolutionary tree, given DNA sequences for leaf taxa and plausible mutations (Python)

Hidden Markov Models and Part-of-Speech Tagging (NLP)

2018

- Implement statistical learning of HMM using training corpus of pre-tagged sentences (Python)
- Implement Viterbi algorithm to assign part-of-speech tags to new sentences using trained HMM

Impact of Language on Perception

Independent Project

[repo](#)

2016

- Analyzed the Sapir-Whorf Hypothesis and its implications in multiple perceptual categories

Organizations and Activities

- CSters: Women in Computer Science, Rice University 2017 - present
- CS Club, Rice University 2017 - present
- Society of Women Engineers (SWE), Rice University 2017 - present
- SASE: Society of Asian Scientists and Engineers, Rice University 2017 - present
- Club Tennis, Rice University 2017 - present
- Music: sing, record, perform, take lessons [soundcloud](#) [youtube](#) 2007 - present
- PyLadies: Austin community of women Python programmers, team programming, presentations 2015 - 2017