

## Education

### Rice University

2017 - present  
Houston, TX

- BS Computer Science, graduating May 2021, GPA: 3.41

### 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 *Backend Engineering Intern*

Summer 2019  
Houston, TX

- Convert Biglearn to highly scalable application by developing testing and deployment automation

### 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, Ruby, RoR, AWS, 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, Pytest, JUnit 5 & QuickTheories, RSpec

## 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

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- 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