

Qifeng (Jeffrey) Sheng

(346) 808-8919 | Spring, TX 77389 | Jeffrey.Sheng@rice.edu | LinkedIn.com/in/jeffrey-sheng

EDUCATION

Rice University

BS in Computer Science
GPA: 3.61/4.00

COMP 215: Intro to Program Design
COMP 382: Reasoning about Algorithms
COMP 310: Advanced Object Oriented Programming
COMP 321: Intro to Computer Systems
COMP 322: Principles of Parallel Programming

Houston, TX
Aug 2017 - May 2021

SKILLS

Programming Languages: Proficient – Python | Java Familiar – C | R
Other Technical Skills: Functional Programming | Parallel Programming | OOP | Algorithms

SELECTED PROJECTS

Pretty Pictures: Image Breeding and Mutation

Rice University | Nov 2018

Java | JavaScript | JSON | Functional Programming | Genetic Algorithms | Spark

- Implemented a genetic algorithm that iteratively improves existing gene trees through crossbreeding and mutation to produce fancy pictures.
- Designed data structures (alleles, geneTree, imageFunction, etc.) that streamlines representing, composing, and randomizing image functions through functional programming.
- Built an interactive UI that enhances user experience.

Inferring Evolutionary Tree from Primates' DNA Sequences

Rice University | Apr 2018

Python | Linear Programming | Computational Biology

- Designed a linear programming algorithm to infer the optimal evolutionary tree out of a total of $4.5e8$ possible trees and to compute the ancestral DNA sequences, given the DNA sequences of 11 primates.
- Implemented a top-down and bottom-up algorithm for computing the parsimony score of an evolutionary tree given a set of taxa (DNA sequences).

QuizME: Facebook Messenger Bot

HackRice 8 | Sep 2018

Lead Programmer

Python | Flask | Heroku | Facebook Messenger Platform

- Programmed an interactive Messenger bot that integrates flash cards to expedite learning process using Flask framework and hosted it on a cloud-based server.
- Established a local database that allows multiple users to interact with the bot simultaneously without interference.
- Working on new features such as accepting user-uploaded quizzes and saving them on the server for all users to access.

WORK EXPERIENCES

Blackboard

Shanghai, China | May 2018 – Jul 2018

QA Engineering Intern

- Refined and ran comprehensive UI and functionality unit tests that encompass 11 components with a total of 1700 test cases after analyzing the framework of the company's apps.
- Presented valuable suggestions on UI design and user experience to the design team by comparing the mobile services of Blackboard and its competitor, Canvas.
- Collaborated with the Dev team to support releases of new builds through bug reporting.

Extracurriculars

- **Leadership:** McMurtry Innovation Space (Treasurer/Technician) | Rice Robotics Club (Designer)
- **Membership:** Rice CS Club | Rice Table Tennis Club | Rice Tennis Club