Ashley D'Souza

Club Tennis, Rice University

Music: sing, record, perform, take lessons

■ akd6@rice.edu ■ 512-228-4140 ■ <u>Home</u> ■ <u>Blog</u> ■ <u>Github</u> ■ <u>LinkedIn</u>

2017 - present

2007 - present

■ Home ■ Blog ■ GI	<u>inub</u> ■ <u>Linkedin</u>
Education ————————————————————————————————————	
Rice University	2017 - present
BS Computer Science, graduating May 2021, GPA: 3.41	Houston, TX
Work Experience	
OpenStax Backend Development Intern - Biglearn/Tutor team	Summer 2019
 Built Rails application with automated testing for two Biglearn endpoints (4,000 students/semester) Transitioned Biglearn to Aurora Serverless for scalability with load-testing & autoscaling (AWS, AWS Aurora) Worked in team of 8 interns to build & pitch note-taking app integrated with OpenStax (Google API, Django) 	
Rice University, Dept. of Computer Science Teaching Assistant	Fall 2019
TA for Reasoning about Algorithms: lead office hours and discussion of labs, homeworks, and exams	Houston, TX
Software Development Skills ———————————————————————————————————	
Programming Languages & Frameworks	
 Proficient: Python, Java, C, Ruby on Rails, Git, Linux, AWS 	
 Basic: Elm, HTML, React, ReasonML/OCaml, Hasura's Postgres + GraphQL 	
Software Design and Testing	
Databases and distributed systems, functional programming, object-oriented design Test driver development, preparty based tasts. Putest, Unit 5, 8, Oviel/Theories, PC and	
 Test-driven development, property-based tests, Pytest, JUnit 5 & QuickTheories, RSpec 	
Projects —	
 Lentil - A Web-Based Musician's Feedback Service Independent Project repo demo Develop full-stack application for use by musicians and teachers (ReasonML, React, Postgres) Musicians submit recordings and receive feedback on specific points in recording 	2018 - present
Physics Sunset Independent Project repo demo	2017
• Designed and implemented browser-based interactive graphical simulation of physics problem (ReasonML)	
Hidden Markov Models and Part-of-Speech Tagging (NLP)	2018
 Implemented statistical learning of HMM using training corpus of pre-tagged sentences (Python) 	
Used Viterbi algorithm to assign part-of-speech tags to new sentences using trained HMM	
Disease Transmission Analysis from Outbreak Data	2018
• Inferred disease transmission tree from disease outbreak genetic/epidemiological data using RDMST (Pytho	,
 Phylogenetic (Evolutionary) Trees Inferred evolutionary tree given DNA sequences for leaf taxa and plausible mutations (Python) 	2018
Awards —	
Rewriting the Code Fellow more	2019 - present
US/Canada-wide competitive award for females in CS: coaching, networking educational programming	US/Canada
PyoFuel: Using Python and Pathway Tools to engineer synthetic biofuel Sole Author more	Dec 2016
 Accepted for 2016 Rocky Mountain Bioinformatics Conference (poster session) 	Colorado
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
Club Townia Diag Hairwayita	2017

soundcloud

<u>youtube</u>