Ashley D'Souza

Society of Women Engineers (SWE), Rice University

Music: sing, record, perform, take lessons

Club Tennis, Rice University

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

2017 - present

2017 - present

2007 - present

■ Home ■ Blog ■ GI	<u>tnub</u> ■ <u>tinkedin</u>
Education ————————————————————————————————————	
 Rice University BS Computer Science, graduating May 2021, GPA: 3.41 	2017 - present Houston, TX
Work Experience	
 OpenStax Backend Development Intern - Biglearn/Tutor team Built Rails application with automated testing to handle two endpoints for Biglearn (Ruby on Rails) 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 Profice Flow HTML React, Reacon MI (OCam), Hassing's Restauras J. Graph Olivers	
 Basic: Elm, HTML, React, ReasonML/OCaml, Hasura's Postgres + GraphQL Software Design and Testing 	
 Databases and distributed systems, functional programming, object-oriented design 	
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) Head Vitable also with the position must of an each tagged sentences using the incident MMM.	
Used Viterbi algorithm to assign part-of-speech tags to new sentences using trained HMM Disease Transmission Analysis from Outbreak Data	2010
 Disease Transmission Analysis from Outbreak Data Inferred disease transmission tree from disease outbreak genetic/epidemiological data using RDMST (Pythone) 	2018 on)
Phylogenetic (Evolutionary) Trees	2018
 Inferred evolutionary tree given DNA sequences for leaf taxa and plausible mutations (Python) 	
Awards ————	
Rewriting the Code Fellow more • US/Canada-wide competitive award for females in CS: coaching, networking educational programming	2019 - present US/Canada
 PyoFuel: Using Python and Pathway Tools to engineer synthetic biofuel Accepted for 2016 Rocky Mountain Bioinformatics Conference (poster session) 	Dec 2016 Colorado
Organizations and Activities ————————————————————————————————————	
CSters: Women in Computer Science, Rice University	2017 - present
CS Club, Rice University	2017 - present
Conjety of Marson Engineers (CME) Disc University	2017

soundcloud

<u>youtube</u>