

Suraj Daru

EDUCATION

Brown University, Providence, RI

Sc.B. Applied Mathematics - Computer Science, Graduating May 2024

GPA: 4.0/4.0

Relevant Coursework: Introductory Functional Programming, Introductory Object-Oriented Programming/Data Structures and Algorithms, Computational Molecular Biology, Statistical Inference, Linear Algebra, Introductory Software Engineering, Discrete Structures and Probability, Chemical Equilibrium Rate and Structure, Organic Chemistry I & II

EXPERIENCE

LANGUAGE AND MIND LAB, NORTHEASTERN UNIVERSITY, Boston, MA

Intern, July 2019–August 2019

- Completed a research project on Maltese plural formation, etymology, and numerals.
- Helped organize stimuli for an ASL experiment led by a graduate researcher.

PROJECTS

Search Engine

Description: Developed a search engine with a partner using Scala that when provided a corpus xml file, outputs relevant results given a query input.

- Led in creating an indexer that calculates the term frequency and inverse document frequency.
- Headed the development of a querier that when given a term, uses the frequencies previously calculated and returns the most relevant pages through a Read-Eval-Print loop.
- Orchestrated the implementation of the PageRank algorithm to prioritize pages according to authority.

RESEARCH – Rubenstein Lab, Brown University

- Working alongside the principal investigator and a graduate student in deriving the structure of the YugO K⁺ channel protein using the Robetta Server, Oct. 2021–Present

SKILLS

- Experience with Python3, Java, Scala, Typescript, HTML, CSS, Bootstrap, ReasonML, Virtual Studio Code, Racket, SQL

ACTIVITIES

- Write it Brown Noveling Club Member (Officer as of Apr. 2021), Feb. 2021–Present
- Volunteer at Quixote Quest at the Center for Family Services, Jan. 2018–2019

AWARDS

- President's Volunteer Service Award
- NJ State Department of Education Seal of Biliteracy in French
- Second Place Nationally in SASETank