Nitya Thakkar

69 Brown St, Box 9533
Providence, RI 02912
Website

(651) 242-0072
nitya_thakkar@brown.edu
LinkedIn

Education

Brown University, Sc.B. Computer Science, GPA: 4.0/4.0 **Providence, RI • May 2023**

Relevant Coursework: Introduction to Object-Oriented Programming and Computer Science, Introduction to Algorithms and Data Structures, Introduction to Computer Systems, Machine Learning, Introduction to Discrete Structures and Probability, Multivariable Calculus, Linear Algebra, Genetics, Equilibrium, Rate, and Structure (CHEM330), Organic Chemistry

St. Paul Academy and Summit School, GPA: 3.99/4.0 **St, Paul, MN • June 2019**

Honors: Cum Laude Society, Ethel E. Pease Award for excellence in mathematics (2019), National Merit Scholar, AP Scholar, Rensselaer Medal (2018), Target Women in Science and Technology EPIC Award (2018), 2017 MN Gold Bilingual Seal for ACTFL Intermediate-High Proficiency in Spanish

Work Experience

Teaching Assistant at Brown University **Jan. 2021 - Present**

- TA for Linear Algebra (Spring '21), responsibilities include grading problem sets and holding weekly office hours
- TA for Introduction to Computer Systems (Fall '21)

Full Stack at Brown **Sept. 2020 – Present**

- Full Stack Software Engineer, code projects for the Brown and Providence community
- Creating a website for a student group involving front-end work in React and back-end work in Node + Express (implementing a database of users with login functionality)

Select Programming Experience

- Doodle Jump, Tetris and Othello (AI feature implemented using Minimax algorithm) games (Java; CS15; 2019)
- Implemented Seamcarve algorithm, removing least important pixel "seams" from an image (Java; CS16; 2020)
- Implemented a Shell, the malloc, realloc, and free commands, and a database involving a TCP protocol, multi-threaded programming, and signal handling (C; CS33; 2020)
- Used bioinformatics tools (GO analysis, IGV/FlyBase, MEME suite, Stringdb) to determine the mechanisms of transcriptional regulation that coordinate synaptic gene expression (BIOL470; 2020)

Programming Skills: Proficient in Python, Java, and C; Experience with JavaScript, React, HTML/CSS, and R

Research Experience

Brown University, Computational Biology Lab **Jan. 2020 – Present**

Dr. Ritambhara Singh

- Co-author on project to predict interactions (A/B compartments) between genes using regression and classification algorithms; project to be presented at the ENCODE project consortium
- Reproducing and expanding on previous results to derive compartments from Hi-C data (using Python, R, and Git)

University of Massachusetts - Amherst, Food Science Lab **July 2018 – Aug. 2018**

Dr. Yeonhwa Park

- Determine the effects of Sulforaphane on aging, obesity and oxidative stress in Caenorhabditis elegans. Extensive data analysis using Statistical Analysis Software, GraphPad Prism, and SPSS
- Received awards for presentation and paper at Twin Cities Regional Science Fair and Minnesota State Science Fair (March 2019), qualified as a finalist for the Intel International Science and Engineering Fair (May 2019)

Additional Involvements

Brown Abhinaya: Bharatanatyam **Sept. 2019 – Present**

- Completed Arangetram, 2-hour long stage debut performance, in 2015
- Professional production in high school, "Ritu - The Seasons": four major performances in Twin Cities (2016-18)

Journalism **Sept. 2019 – Present**

- Staff writer for *The Brown Daily Herald*
- Editor-in-Chief of *Aureus*, feature magazine, and news editor for online publication, *RubicOnline* (2016-19)

Brown Elementary After-school Mentoring **Jan. 2020 – Present**

- Volunteer with and mentor 2nd-grade students once a week at local elementary school