Nitya Thakkar

69 Brown St, Mail 9533
Providence RI 02912
Website

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

Education

Brown University, Sc.B. Computer Science **Providence, RI • May 2023**
Relevant Coursework: Introduction to Object-Oriented Programming and Computer Science (CS15), Introduction to Algorithms and Data Structures (CS16), Multivariable Calculus (MATH180), Linear Algebra (MATH520)

St. Paul Academy and Summit School, GPA: 3.99/4.0, SAT: 1550, ACT: 35 **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

Programming Experience

Projects at Brown **Sept. 2019 – Present**
- Created DoodleJump, Tetris and Othello (AI feature implemented using Minimax algorithm) in Java through CS15
- Implemented Seamcarve algorithm, removing least important pixel "seams" from an image, in CS16

Independent Study in High School **Jan. 2018 - Aug. 2018**
- Designed an app in JavaScript and Android Studio to assist people with allergies when abroad
- Features: translations for at least 20 major countries of words and phrases, description on what to do if someone has an allergy attack, how to contact emergency officials, additional location tracker feature (used Google APIs)

Programming Skills: Proficient in Java & Python; experience with JavaScript (Android Studio), HTML/CSS & R

Research Experience

Brown University, Computational Biology Lab **Jan. 2020 – Present**
Dr. Ritambhara Singh
- Conducting research at the intersection of Machine Learning and Biology
- Co-author on project to predict interactions (A/B compartments) between genes using regression and classification algorithms (ex. linear regression, random forest model)
- Reproducing & expanding on results from various studies to derive compartments from Hi-C data (Python, R & Git)
- Project to be presented at the ENCODE project consortium

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
- Received awards for presentation & paper at Twin Cities Regional Science Fair and Minnesota State Science Fair (March 2019), qualified as a finalist for the prestigious Intel International Science and Engineering Fair (May 2019)
- Extensive use of data analysis using Excel, Statistical Analysis Software (one-way ANOVA and chi-square test), GraphPad Prism (Logrank test) and SPSS

University of Minnesota, Immunology Lab **June 2017 – Sept. 2017**
Dr. Stephen Jameson
- Assisted a postdoctoral student with her research: studying killer cells of the adaptive immune system (CD8 T cells) and how to tweak the CD8 T cell response to generate a response against infections and cancer
- Ran PCR on mice blood, sorted data in a Flow Cytometer, analyzed data using Excel and comparative Ct method

Additional Involvements

Bharatanatyam **2005 – Present**
Classical Indian Dance
- 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)
- Dancer in Brown Abhinaya (2019 – Present)

Brown Elementary After-school Mentoring **Jan. 2020 – Present**
- Volunteer with and mentor 2nd-grade students once a week at local elementary school

Journalism **Sept. 2015 – Present**
- Staff writer for *The Brown Daily Herald* (2019 – Present)
- Editor-in-Chief of *Aureus*, feature magazine, and news editor for online publication, *RubicOnline* (2016-19)