

# Nitya Thakkar

69 Brown St, Mail 9533  
Providence RI 02912

(651) 242-0072  
nitya.thakkar@brown.edu

## 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

## Research Experience

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

*Dr. Ritambhara Singh*

- Conducting research at the intersection of Machine Learning and Biology.
- Working on a project to predict A/B compartments from Hi-C contact matrices in the human genome
- Reproducing results from various studies to derive A/B compartments from Hi-C data
- Writing and running code in python and R

**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 both presentation and 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
- 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

## Programming Experience

**Projects at Brown** **Sept. 2019 – Present**

- Created Fruit Ninja, DoodleJump, Tetris and Othello in Java through CS15
- Implemented Seamcarve algorithm, removing least important pixel “seams” from an image, in CS16

**Advanced Programming and Engineering** **Jan. 2018 - Aug. 2018**

*Independent Study in High School*

- 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 & R; experience with JavaScript (Android Studio), HTML/CSS & C

## Additional Involvements

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

*Classical Indian Dance*

- Been dancing since 2005, completed Arangetram, 2-hour long stage debut performance, in 2015
- Professional production in high school, “Ritu - The Seasons”: four major performances in Twin Cities, additional performances in Madison, WI and Washington D.C. (2016-18)

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

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

**The Brown Daily Herald** **Sept. 2019 – Present**

- Staff writer for the BDH
- Editor-in-Chief of *Aureus*, feature magazine and former news editor for online high school publication, *RubicOnline* (2016-19)