# SAHIL PATEL

#### **EDUCATION**

## University of North Carolina at Chapel Hill – Chapel Hill, NC

Aug 2018-present

Biomedical Engineering/Applied Mathematics Major and Computer Science Minor

- GPA 4.00; Dean's List, Aug 2018-present; Abram's Scholar, Aug 2019-present
- Partnerships Committee Member of GlobeMed, an NPO dedicated to global health equality

#### North Carolina School of Science and Mathematics – Durham, NC

Aug 2016-May 2018

- GPA 5.60; Scores: 800 on SAT Subject Tests for Math 2, Physics, and Chemistry, 1580 on SAT
- President of Math Club & Chess Club; Science Olympiad Captain 2017-2018; Ultimate Frisbee Player; HOSA Member

#### **Honors and Awards**

- Top 8 in North America in the 2020 P&G CEO Challenge
- Participant in the 2018 Putnam Exam, score of 22; Honorable Mention in the 2018 International Math Modeling Contest
- Part of the winning team in the 2018 Carolina Data Challenge and runner-up team in 2019

## Global Experience – Stockholm, Sweden

May-June 2019

Study Abroad

• Learned discrete mathematics in Stockholm while acquiring skills in communication, risk-taking, and adaptability

#### **EXPERIENCE**

## Capital One – McLean, VA

Jun 2020 – Aug 2020

Business Analyst Intern

• Analyzed data sets to perform product evaluation and outline a plan to ramp spend from the B2B space

#### **University of North Carolina Chapel Hill** – Chapel Hill, NC

Jan 2019 – present

Student Research Assistant

• Testing OCT devices while investigating the elasticity of tissue in airways, performing both data analysis and image processing in MATLAB with the intent of transitioning to real-time processing

### MyChessTutor - Chapel Hill, NC

Jan 2019 - Sep 2019

Chess Instructor

• Planned lessons for students (all ages/skill levels) and taught them via video chat and a live analysis board

#### Numerade – Charlotte, NC

Jun 2019 - Aug 2019

Educator

• Developed short educational videos for students to view for help with textbook questions

#### North Carolina School of Science and Mathematics – Durham, NC

Aug 2017 – May 2018

Leadership: Attaché

• Networked with students, parents, and alumni to gain funds for the school's foundation

#### Duke University - Durham, NC

Jun 2017 - Feb 2018

Researcher

• Worked in the Gong Lab at Duke, built two fluorescent microscopes, took images targeting individual neurons in zebrafish brains upon stimulus, and identified individual neurons using MATLAB

#### **PROJECTS**

HackNC-SafeWallet

October 2019

1<sup>st</sup> prize project at HackNC

- Created an app which allows parents to manage children's funds and spending by allocating money usage
- https://devpost.com/software/test-2ehay7

# North American Computational Linguistics Olympiad

April 2018

9th place in the North American Contest, 1st US Alternate for International Contest

• Solved linguistics problems in obscure foreign languages or fictional languages with only the use of logic

## High School Mathematics Contest in Modeling – Designed an Olympic-caliber ski resort

November 2017

One of 8 Outstanding Papers in Contest; One of 3 for the Ski Resort Problem

- Used math modeling, ski resort rankings, and geographical data to design an Olympic-caliber ski resort
- https://drive.google.com/file/d/1jlHymxO41OJQRaznEE-fWdsngv5PxVJZ/view?usp=sharing

#### ADDITIONAL INFORMATION

- Skills: Problem-Solving, Quick Learning, English Fluency, French Proficiency, Gujarati Proficiency, Python, MATLAB, Java, SQL, Excel/Office, Logic, Teamwork, Teaching, Research
- Relevant Courses: Mechanics, Electromagnetism/Quanta, Linear Algebra, Discrete Math, Differential Equations, Multivariable Calc., Probability, Graph Theory, Complex Systems, Math Modeling, Networks, Scientific Programming, Organic, Materials, and Analytical Chemistries, Neuroscience, Genetics, Biochemistry, Fundamentals of Programming
- Received an audition for the 2020 College Jeopardy Championship