# Bhrugu Patel

bhrugu.patel@mail.utoronto.ca | (437) 229 - 5807

## **EDUCATION**

## **UNIVERSITY OF TORONTO**

H.B.Sc. IN BIOCHEMISTRY AND COMPUTER SCIENCE

Expected Grad: 2022 | Toronto, ON Cum. GPA: 3.7 / 4.0

# IINKS

LinkedIn://bhrugupatel

# COURSEWORK

## **UNDERGRADUATE**

Discrete Mathematics Organic Chemistry Physical Science Individual Research Molecular Aspects of Cellular and Genetic Processes

Cellular and Molecular Biology Laboratory

## **SKILLS**

## **LAB TECHNIQUES**

Sol-gel synthesis • FTIR • SEM

- Hydrothermal synthesis
- SDS-PAGE Plasmid Transformation
- Preparation of competent cells
- DNA isolation DNA digestion
- Maintaining bacterial culture
- Bacterial media preparation

## **PROGRAMMING**

Proficient:

C • Python • Java • Autodesk Inventor Familiar:

HTML\CSS • Javascript •

ATEX

## RESEARCH / VOLUNTER

#### UNDERGRADUATE RESEARCHER

Clean Energy Lab, Professor Oleksandr Voznyy

- Synthesized amine functionalized silica nanoparticles using a sol-gel method for efficient CO2 capture
- Learned how to use machine learning and applying it to the field of electrochemistry to find a possible chemical composition that stores more energy than current Lithium-ion batteries

#### **VOLUNTEER IN CARDIOVASCULAR CLINIC**

Patel Vascular Lab, Dr. Rajendra Patel

- Assisted Dr. Patel firsthand during minor surgeries, filed patient reports, and scheduled appointments for patients
- Learned how to use an Ultrasound machine to check for Carotid Artery Disease and buildup of plaque

# **EXPERIENCE**

## **ECL TUTORING SERVICE** | Science and Math Tutor

Feb. 2019 - May 2019 | Ajax, ON

- Created lesson plans and worksheets that allowed students to strengthen their understanding of the course material
- Clarified students' concerns and questions preventing them from achieving complete understanding of the topics

# CO-CURRICULAR ACTIVITIES

## INDIAN STUDENT ASSOCIATION | JUNIOR EVENTS AND SOCIAL

Media Director

Oct. 2018 - Present | Toronto, ON

- Transformed a meeting place into an aesthetic marvel to enhance the cultural experience during festivals
- Utilized social media platforms such as Facebook, Instagram, etc. to promote the organization and its brand

# **AWARDS**

\$3,000 UofT Enterance Scholarship

\$1,500 Saratoga Hospital Volunteer Guild Scholarship

\$1,000 Nick Cammarata Memorial Scholarship

2018 AP Scholar with Honour and AP Scholar

# INTERPERSONAL SKILLS

- Developed expertise in communication by interacting with doctors (550+hours volunteering in hospitals)
- Exercised leadership qualities while planning for a Thanksgiving banquet and Diwali festivities at University of Toronto
- Demonstrated written and oral proficiency within lab reports and scientific presentations