# Aleem Tariq

P: 604-727-0595 E: <u>aleemtariq@hotmail.com</u> https://github.com/aleemer

#### **Education**

**BCS Computer Science (Exp. 2023)** 

University of British Columbia

**BSc Biology (2015-2020)** 

University of British Columbia

#### **Relevant Courses**

CPSC 110: Programs & Programming CPSC 221: Algorithms & Data Structures

CPSC 121 : Models of Computation MATH 221: Matrix Algebra CPSC 210: Software Construction BIOL 301: Biomathematics

## **Projects**

August 2020

### TicTacToeAgent (Python)

- Developed a tic -tac-toe game where the user plays against an AI
- Project involved a minimax (search) algorithm

Sept 2019 - Dec 2019

#### DailyPlanner (Java)

- Developed an application that can function as a daily planner
- Incorporates an easy to use GUI, where user can keep track of tasks

Sept 2019 – Dec 2019

## Disease Emergence Model (Mathematica)

https://drive.google.com/file/d/15Kg1FbWfh8mHixDM1jPtiH7uNv314VEx/view?usp=sharing

- Modelled the emergence of a disease epidemic in a growing population to determine the minimum population size needed to sustain an epidemic
- · Investigated conditions necessary to limit a disease outbreak

Jan 2019 - Apr 2019

# Spatial Navigation and Sensory Modality

 $\underline{https://drive.google.com/file/d/1wNndRU78QqfiqDCXPQNtmfHVUEl0sAq0/view?usp=sharing}$ 

 Devised an experimental approach, with the specific aim of discerning the relationship between sensory integration, place cells, and navigation strategies in rodents

Nov 2017 - Dec 2018

## Smartphone Wallpaper Study - Social Health Lab (UBC)

 As a research assistant, contributed to Dr. Alec Beall's investigation into the role of parenting-relating visual priming on parenting motivations, short-term mating motivation, and punitive condemnation of cultural norm violations

#### **Technical & Other Skills**

#### Software/Programming skills

- Java, Python, C++ language environments.
- Familiarity with Data Types and Structures; Algorithm Analysis & Search/Sort Algorithms
- Familiarity with Version Control, JUnit testing, Implementing OOP and Design Patterns
- Experience with incorporating APIs into projects.

### Analytic skills

- · Experience with biological systems modelling in R and Mathematica
- · Experience with biological experimental design and testing
- · Familiarity with calculus, formal logic, and systems modelling with linear algebra

#### Other

- Interpersonal, teamwork, leadership skills, time management, ability to follow instructions, and plan and commit to work diligently
- Reliable, motivated, honest, and willing to learn

## **Work Experience**

Aug 2017 - Sept 2017

### *Undergraduate Academic Assistant - Biology Department (UBC)*

• Reviewed course textbooks and assisted in office work and setting up departmental events, through effective planning and diligence

Feb 2014 - Aug 2017

#### Volunteer - Vancouver Coastal Health

 Engaged patients by directing and assisting art programs, gardening, and other leisure activities, including interviews and contribution to a seasonal newsletter

Sept 2013 - Dec 2014

## Volunteer - Harvest Project

- Integrated well with a team committed to reaching out to individuals and families on the North Shore facing poverty and familial strife
- · Assisted maintenance of warehouse and food stores, ensuring freshness and availability

### **Activities and Interests**

I have a deep interest for programming and science, especially in the areas of software development, neuroscience, and psychology. I enjoy reading scientific papers and non-fiction in my spare time. I am eager to expand my skillsets, and always looking for an opportunity to work on projects that can help me explore my interests further.

#### References

Available upon request.