TABOKA CHLOE **DUBE**

chloetdube@icloud.com

A young and ambitious woman in STEM who is ready to grow her skills. As a forward-thinking Computer Science student at the University of the Witwatersrand, I am constantly driven by curiosity and the desire to push against traditional ways of thinking and working. The world moves rapidly and so should we, there will always be brand-new technology breakthroughs and I want to be a part of them. I thrive on embracing change and seeking creative solutions to complex and unique problems

EXPERIENCE

CONTRACT, 2024-

FIRST YEAR EXPERIENCE MENTOR, UNIVERSITY OF THE WITWATERSRAND

My role as a First Year Experience mentor at Wits University entails facilitating a peaceful transition for new university students into the environment.

- I am gaining reasonable leadership skills.
- I have learnt to relate to people of different backgrounds.
- I have also gained knowledge on teamwork and mental health relations

EDUCATION

HIGH SCHOOL 2017 TO 2021

NATIONAL SENIOR CERTIFICATE, GRACE TRINITY SCHOOL FOR GIRLS

I matriculated with 4 distinctions in Biology, Pure Mathematics, History and Life Orientation achieving an average of 80%.

Additionally, I had Full academic school colors all throughout my high school career.

Through being a member of the Johannesburg Junior Council I was also able to acquire my Full Leadership school colors.

Further, I was involved in extra murals such as Drum-Majorettes and Netball which both helped me gain my Half Sport school colors.

My high school experience was well rounded and diverse as I also participated yearly in theatre productions to grow my cultural tastes.

2022-

UNDERGRADUATE, UNIVERSITY OF THE WITWATERSRAND

I am currently pursuing a Bachelor's degree in Computer Science and Computational and Applied Mathematics.

- I have gained a reasonable skillset in C++, Java, Python, and SQL
- I have completed a Data Structures course in C++, I use Python for numerical methods, and I am currently building application projects using Java and mastering Databases using SQL.
- Currently independently learning HTML, CSS, and JavaScript.

SKILLS

- Problem solving
- Logic
- Fluent in English and Ndebele
- I can gather relevant data from diverse sources and filter it down to useful information, which works in synergy with my writing abilities.
- Understanding
- Determined
- Relatable
- Timeous
- I also know to strategically allocate time blocks for various tasks that allow me to optimize my productivity and work-life balance.

ACADEMIC PROJECTS:

- March, 2022 'Wordle' project. Inspired by the popular New York Times, 'Wordle' game. A word game that randomly picks a 5 letter word for the player to guess. The player then gets 5 opportunities to guess the word, each guess shows whether the player has guessed any correct letters in the correct index, any correct letters in the incorrect index or generally incorrect letters. It is played in console and was built using Python.
- May, 2022 'Ants' project. A game where a player has to guess the location of an ant on a board of user input size. This ant can move in any four of the cardinal directions and can wrap around any edges of the board. If the player guesses the position correctly, they win. If not, game over. This game is played in console and was built using C++.
- September, 2022- 'Sudoku' project. Inspired by the famous 'Sudoku' game, this project made use of the 'Depth First Search' algorithm in C++. I created a 9*9 board where a user inputs a 9*9 grid game with the blank positions denoted by a 'O'. The algorithm then has to solve the Sudoku.
- October, 2022 'Maze' project. A game that made use of the 'Breadth First Search' algorithm. Where a user inputs a grid with a final location into the console and the algorithm must find the shortest possible path from this location to a final location automatically set by the initial grid. The output would be a path made of asterisks. This was built using C++.
- May, 2023 'Woofer Project'. A fun social media app built using Java and MySQL. Woofer allows
 a user to create written status updates that let their friends know what's on their mind. A user

- can add, remove or search for friends. View friends' statues and find mutual friends. Inspired by Twitter.
- October, 2023 'Snake AI'. A fresh take on a classic game, Snake AI is game with a snake agent that finds the best path to the apple on the board. The agent should avoid obstacles and other snakes as this would result in death. The more apples it eats, the bigger it gets! This was built using Java and playable using an executable JAR file.
- May, 2024 'Staff Relations Management'. Built using Javascript, HTML, CSS, Azure Web Services and Firebase, this project equips companies with a centralized platform to streamline all aspects of staff relations. It allows employers to create healthier work environments and promote mental health awareness, track employee time on tasks for accurate client billing and efficient financial and capacity management, and foster a culture of continuous performance feedback. By integrating these features, the platform simplifies the management of employee well-being, productivity, and feedback, ultimately enhancing overall staff relations.
- More to be pursued...

PERSONAL PROJECTS:

- My personal portfolio built using JavaScript, HTML and CSS.
 - The web page is hosted using GitHub pages and is consistently being improved and monitored, the current version can be viewed via: https://chloe900.github.io/personalportfolio/

ACTIVITIES AND PHILOSOPHY

Currently pursuing my Bachelor's degree in Computer Science at the University of the Witwatersrand. I learn languages in my free time such as Korean and Arabic.

I firmly believe in the power of collaboration and the strength that comes from diverse perspectives. By doing various collaborations with individuals from different backgrounds and areas of expertise in my degree, I have witnessed first-hand the transformative outcomes that arise from bringing together a variety of ideas, skills, and experiences.

Group work is valuable as it shows that one does not only need confidence in themselves to thrive, but also needs to be confident in others in order to foster positive relationships with other individuals.