

# **ALAN ROSARIO FERNANDES**

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# BRIEF SUMMARY

Highly motivated to explore and embrace new techniques to adjust to any work that will be assigned to me. An eager learner who is consistent in their desire to acquire new knowledge and skills. As a dedicated worker, I thrive on tackling tasks with perseverance and a strong work ethic, consistently striving to give my best in every project I undertake.

#### **KEY EXPERTISE**

QGIS Python Front-End Web Development Excel Canva ArcGIS Data Visualization

### **EDUCATION**

EDUCATION	
Don Bosco Institute of Technology Mumbai  B.E Computer Engineering   CGPA: 8.64 / 10	2020 - 2024
12 <sup>th</sup>   HSC   Percentage: <b>74.46</b> / <b>100</b>	2020
10 <sup>th</sup>   SSC   Percentage: 84.40 / 100	2018

### **INTERNSHIPS**

Don Bosco Institute of Technology & Department of CSR, Larsen & Toubro Limited

30 Sep, 2023 - 16 Jan, 2024

Key Skills: Python Classroom Management Excel Teaching

I was tasked with assisting students in learning Python during my internship for the "Move-the-turtle" course, which was sponsored by Larsen & Toubro and powered by Don Bosco Institute of Technology. Our primary attention was directed towards the Turtle package, which facilitates the creation of diverse graphics and animations using Python. The major objective was to instruct students on Turtle and various Python concepts while assisting them in developing a project based on the knowledge they had acquired.

Don Bosco Institute of Technology & Department of CSR, Larsen & Toubro Limited

01 Jul, 2023 - 31 Oct, 2023

Student Delivery

Key Skills: QGIS Microsoft Excel Teaching Spatial Analysis Classroom Management

As an intern for the MapMakr course, I found immense satisfaction in contributing to this noble cause, fostering interest in STEM fields among underprivileged youth, and promoting the use of geospatial tools like QGIS for spatial analysis. This experience has not only enhanced my teaching abilities but also deepened my understanding of the importance of inclusive education.

## **PROJECTS**

### **Gamification for Health Data Collection**

Mentor: Mr. Imran Ali M. | Team Size: 3

Key Skills: Web Development MySQL

It is an innovative website aimed at empowering users to manage their health effectively. By creating a platform where users could answer health and lifestyle-related questions, we generated personalized results based on various formulae that we obtained by doing research work to help them analyze their health status. Utilizing SQL database, HTML, CSS, and JavaScript, I played a key role in building the user-friendly website. The project demonstrated the power of gamification in healthcare, motivating users and collecting valuable data to support informed decision-making for a healthier lifestyle.

# **Green Cover Identification and Hotspot Analysis**

Mentor: Ms. Sejal Chopra | Team Size: 3

Key Skills: Web Development QGIS Python MySQL

I contributed to the creation of an engaging website focused on forest-related issues, utilizing Geographic Information System (GIS) technology and geospatial data to produce interactive forest cover maps and insightful forest analyses. The project aimed to educate users about the current state of forests, encourage forest conservation and provide reliable data from credible sources. I played a key role in developing the website's functionality using SQL database, HTML, CSS, and JavaScript, ensuring a user-friendly experience. The maps that have been displayed on the website have been made using spatial data obtained from trusted sources and QGIS (Quantum GIS). Jupyter along with forest data had also been used to make graphs based on trends of various types of forest in different states of India.

Cognitive Structuring: Adaptive Learning for Dyscalculic Children

Mentor: Ms. Dipti Jadhav | Team Size: 3

Key Skills: Python Deep Learning Data Analytics

Inspired by an earlier project based on Bayesian Knowledge Tracing (BKT), this project sought for more complex assessments by incorporating long-term and short-term memory (LSTM) strategies that educate sequential learning processes and facilitate intellectual communication, allowing personalized and customized learning experiences. These advancements made it possible to better understand how children develop dyscalculia in mathematics; hence, improving support and intervention strategies. Our integrated approach uses LSTM and DAG which are key features towards enhancement of math basics for children with dyscalculia while promoting understanding as well as improving their skills.

### **PUBLICATIONS / RESEARCH / WHITE PAPERS**

# **Green Cover Identification and Hotspot Analysis**

23 Jan, 2024

IEEE | No. of Authors: 4

Key Skills: QGIS Spatial Analysis Python Data Visualization Data Analysis Web Development GIS

To address global challenges like urbanization and climate change impacting health, a website is deployed to raise awareness about the deteriorating state of forests. Using QGIS and geospatial data with the World Robinson Projection, the site analyzes visual representations of forests. Results include mapping forest distribution, identifying dominant types, and assessing factors affected by them. The goal is to engage people in maintaining and restoring forests for thriving, healthy communities.

### **ACHIEVEMENTS**

- Participated and presented a Research Project titled "Cognitive Structuring: Adaptive Learning for Dyscalculic Children" at 18th
   Aavishkar: Inter-Collegiate / Institute / Department Research Convention (Zonal Round) organized by the University of Mumbai
- Participated in the National STEM Challenge at A.M. Naik Tower, Powai, Mumbai conducted by VASCSC and Larsen & Toubro Limited

#### **ASSESSMENTS / CERTIFICATIONS**

**Scrum Fundamentals Certified (SFC)** 

Key Skills: Scrum

Map Academy: get mapping quickly, with QGIS

Key Skills: QGIS

Microsoft Excel - Excel from Beginner to Advanced

Key Skills: Excel

# **EXTRA CURRICULAR ACTIVITIES**

Security And Logistics at College events

#### PERSONAL INTERESTS / HOBBIES

- Football
- Cooking

#### IMs

o Other - www.linkedin.com/in/alan-fernandes08

## **PERSONAL DETAILS**

Gender: Male
Marital Status: Single

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