


UMAL MANJITHA







Civil Engineering Undergraduate

Motivated undergraduate student from University of Moratuwa with strong technical skills. Seeking to utilize civil engineering knowledge and apply academic concepts to real-world infrastructure projects during employment. Practical experience with AutoCAD, Revit, HEC-HMS, Python and SAP2000. Passionate about sustainably designing and improving structural systems, buildings, and utilities.

EDUCATION

- **University of Moratuwa**
B.Sc. Engineering (Hons.) in Civil Engineering
Current GPA - 3.20/4.0 
Aug 2021 - Present
- **Rahula College Matara**
GCE Advanced Level - Physical Science Stream
Z - Score : 2.5532


CONTACT

-  [+94 71 366 4024](tel:+94713664024)
-  manjithahhu.20@uom.lk
-  umal.netlify.app
-  linkedin.com/in/umal-manjitha
-  github.com/manjithahhu20
-  behance.net/umal_manjitha





TECHNICAL SKILLS

- **Tools**
SAP2000 | ETABS | Revit
Prokon | CSI SAFE
AutoCAD | Civil 3D
HEC-HMS | Figma
Git/Github | Android Studio

WORK EXPERIENCE

- **Trainee Civil Engineer - State Engineering Corporation SL**
Dec 2023 - May 2024 | ETABS, MS Project, AutoCAD 
 - Gathered knowledge and hands-on experience in mass concreting, reinforcement works, site documentation, site planning, quality assurance

PROJECTS

- **Assessing HEC-HMS model and Machine Learning performance in predicting river discharge** 
Jun 2024 - Present | HEC-HMS, ArcGIS, Python
Undergraduate Research Project
 - Develop and calibrate a HEC-HMS model for simulating the discharge
 - Develop and train machine learning algorithms for predicting the discharge
 - Compare the performance of the HEC-HMS model and the machine learning algorithms
- **Comprehensive Design Project - Waterfront Development in Galle** 
Oct 2024 - Present | HEC-HMS, ArcGIS, Geo Slope, ETABS
Contribution to the project
 - Stabilizing the 15m height steep slope at back of the site
 - Flood risk assessment for project site
 - Field Visit - Hydrological impact assessment
 - Making of the ETABS model for the building - ongoing
- **Shell Roof Design for Basketball Stadium** 
Sep 2023 | SAP2000, AutoCAD, Grasshopper
Project scope
 - Gave three alternative designs for the roof structure
 - Define the shape of the structure by form-finding method
 - Calculate the thickness of the shell by central line theory
 - Building a scale down physical model for testing
- **Leo Scroll** 
Jun 2021 | App Development, Flutter, Android Studio
Key Responsibilities
 - Member of App Development Team
 - Developed a cross-platform mobile app 'Leo-Scroll'
 - UI/UX Design for the app

● Frameworks

Finite Element Analysis
Computational Fluid Dynamics
GIS | BIM
NumPy | SciPy | Pandas

● Programming Languages

Python
JavaScript
MATLAB
C++
LATEX

● Languages

English | professional proficiency
Sinhala | native proficiency

● Sports

Swimming
Badminton
Hockey

OTHER SKILLS

Leadership | Creativity

Graphic Design

3D Modeling & Design

Time Management

Team Work

REFERENCES

● Prof. Lalith Rajapakse

B.Sc. Eng. Hons. (Moratuwa), M.Sc. (Saitama),
Ph.D. (Saitama), CEng, ECSL, MIESL.

Professor, Department of Civil Engineering,
University of Moratuwa

Email: lalith@uom.lk
Phone: +94 11 265 0301 Ext. 2116

● Dr. Chamal Perera

B.Sc. Eng. Hons. (Moratuwa), M.Sc. (Moratuwa),
Ph.D. (Nagoya).

Lecturer, Department of Civil Engineering,
University of Moratuwa

Email: chamalp@uom.lk
Phone: +94 71 248 2872

● Coursera Project Network

R Programming, Machine & Deep Learning
• Mining Quality Prediction Using Machine & Deep Learning

EXTRACURRICULAR ACTIVITIES

● Civil Engineering Society University of Moratuwa

Public Relations Committee Lead | Jul 2022 – Present
• Maintenance of ces.uom.lk website, FB pages, LinkedIn

● Matara District Engineering Professionals Association

Lead Designer | Aug 2020 – Aug 2024
• Coordinate Flyer, Video Designs for the Events and Meeting in the society

● Leo Club of University of Moratuwa (Leo District 306A2)

Member | Jun 2022 – Jun 2023

● Member of the School Hockey Team

Left Forward | 2014 – 2019

COURSEWORK & ADDITIONAL TRAINING

● ETABS & SAFE in the Structural Design | Udemy

● Autodesk Revit & Robot Structural Analysis + Sheets + BOQ | Udemy

● Introduction to Data Science Specialization | IBM

Tools for Data Science, Data Science Methodology, Databases and SQL for Data Science with Python

● Project Management Specialization | Google

Project Initiation: Starting a Successful Project, Project Planning: Putting It All Together, Project Execution: Running the Project

● AutoCAD | Sault College of Applied Arts

● Civil 3D – MEGA course for Civil Works | Udemy

● Front-End Developer Professional Certificate | META

VOLUNTEERING EXPERIENCE

● IEEE Student Branch University of Moratuwa

- Volunteered in "Rise Up Mora 2022" – Contributed to develop the interview web portal.
- Volunteered in ""Gammaddata IEEE Api" – Technical Team

● EXMO | 2023

- Web and App Team of the Marketing Committee
- Made 3D AR models for the App.
- Department facilitator for Surveying division

● Civil Engineering Society UoM

- Suhastha 2023 – Member of the Marketing and Fundraising
- Civil Padura 2025 – Member of the Video Editing Team