Madhan Mohan Reddy Kodatala

Linkedin: Madhu1056
Github: github.com/madhu1056

Email: madhummr2000@gmail.com
Mobile: +91-733-7231-056

EDUCATION

- **Blekinge institute of Technology** — Karlskrona, Sweden
  Bachelor of Technology - Computer Science; — *August 2021 - July 2022*
  Courses: *Python Programming, Cloud Computing, Mobile Application Development, Usability and Interaction Design, Software Testing*

- **Jawaharlal Nehru Technological University** — Anantapur, India
  Bachelor of Technology - Computer Science; GPA: 7.31 — *July 2018 - July 2021*
  Courses: *Operating Systems, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases, Computer Networks*

SKILLS SUMMARY

- **Languages**: C++, Python, C, HTML, CSS, SQL
- **Frameworks**: Django, REST Framework
- **Libraries**: Matplotlib, Numpy, Pandas, Pygame, STL(Standard Template Library)
- **Tools**: Github, Docker, Vagrant, GIT, Maven, MySQL, Eye Automata, Jenkins, Mod Header,Virtual Box
- **Platforms**: Windows, Android, AWS
- **Soft Skills**: Leadership, Event Management, Writing, Time Management

EXPERIENCE

- **IBM Skill Build-Trainee** — Remote
  Student Developer (Full-time) — *March 2021 - April 2021*
  - **Training**: Learned how to fetch the data from github and then got familiar with the tools like github, git, VScode and understand how to solve the problems
  - **Development**: Worked as a backend developer and wrote code for authentication using Python.

PROJECTS

- **Continuous Integration Environment**: In this project we built a continuous integration (CI) environment which is used for building a software testing project and **executing tests automatically**, here we have used the following tools:
  Jenkins: The continuous integration and continuous deployment (CI/CD) tool
  Maven: Build automation testing tool.
  Junit: Unit testing framework.
  Version Control Server and Software: Github and Git. (March,2022)
- **Graphical User Interface Testing**: In this project I have tested an online website called Cricbuzz.com using the **EYE automata** which is a automation testing tool. (February, 2022)
- **Client Server solution for a file management (Python)**: A client-server application can be simplified to describe a model wherein a program (the server) receives and handles requests of services done by another program (the client). (june,2022)
- **Credit Card Validator (C++)- Luhn's Algorithm** : Credit card validator is a project which uses Luhn's Algorithm to find whether the given credit/debit card is a valid number or not and it also identifies the financial corporation which it belongs to like Mastercard, Visa. (August,2022)
- **Tic-Tac-Toe Game (C++)**: Tic-Tac-Toe is one of our childhood game which consists of two players who battle each other using symbols X and O. (September,2022)
- **Edge detection using python**: : Detecting the edges of an image using masking of bits here we convert the input image into grayscale code and then using the masking of bits we then find the edges based on the bit value configuration. (October 2021)
- **Deployment of a web application in Amazon Web Services**: we have deployed a web application in Amazon Web Services which helps us to achieve scalability with respect to computation and high availability of computation. We have used Auto scaling, Load Balancing, S3, and EC2. (January 2022)
- **Monitoring the performance of the EC2 instance while CPU and disk are under pressure**: Here we have created an EC2 instance and generated workload on the instance using the Sysbench tool and then using cloud watch we have observed the performance. (November 2022)
- **A simple snake game using Pygame**: I have built a simple snake game that we used to play on our old keypad phones, where the snake is kept in a closed area if it touches its own body the game is over, it was built using python game development module. (May 2021)
- **Profiles Rest Api**: I have developed a simple PROFILES REST API using Python and Django framework which consists of User Login and Authentication, User Profile feed view page, and the users are able to use PUT, PATCH, GET and DELETE operations on their own profile details in the database. The technologies which I have used are Python, Django, Rest framework, Vagrant, Virtual Box, GitHub, and Mode-Header. (January 2023)

Publications

- **Bachelor Thesis: Comparing Amazon Prime Video and Netflix based on their usability factors (Usability Testing, HCI principles)**: Our thesis is a Comparative study on Amazon Prime Video and Netflix, in our thesis we have **tested** both the applications based on their usability factors and **Nielsen's principles**,and the methodology we used is survey evaluation. Based on the results we concluded which application is providing the best user experience for their users. Publishing on July 7 2022 by BTH (July 2022).   Please refer to the published document details here: **Bachelor Thesis**

Certifications

- AWS Cloud tools and essentials (January, 2022)- AWS
- IBM Skill build (April, 2021) - IBM
- C++ fundamentals (August, 2022) - MIT
- Python Programming Master class (October, 2022) - UDEMY
- Mastering Data Structures using C and C++ (December, 2022) - UDEMY
- Build a Back-end Rest API using Python and Django (January, 2023) - UDEMY

Honors and Achievements

- Awarded 50% scholarship for my Bachelor's final year at BTH - July, 2021
- I have solved more than 100 problems in leetcode platform using C++ - Present, 2023
- I have solved 95+ problems in Hacker Rank platform using Python, 2021