Sandesh Ghanta

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EDUCATION

AMRITA UNIVERSITY

B.Tech in Computer Science
Expected April 2020 | Kollam, India
Current CGPA: 8.9/10

MAHATHI HIGH SCHOOL

Board of Intermediate Education, AP
March 2016 | Vizag, India
Percentage: 93.6%

LINKS

Codechef:// sandeshghanta
Codeforces:// sandeshghanta
Github:// sandeshghanta
Quora:// Sandesh-Ghanta

COURSEWORK

UNDERGRADUATE

Data Structures + Practicum
Operating Systems + Practicum
Digital Systems
Discrete Mathematics
Differential Equations

Achievements

- Qualified for ACM ICPC 2019 Regionals
- Reached 5 star rating in Codechef
- Reached Expert rating in Codeforces
- Ranked 2'nd in Intra College Coding Contest

SKILLS

Programming Languages

C++ STL: Implemented Algorithms[link]
Python: Scraped Websites and Automated Tasks[link]

EXPERIENCE

verticalthings | Internship

June 2018 - July 2018 | Microsoft Research, India

Estimating the Worst Case Execution Time (WCET) of an embedded system is crucial as it helps developers to estimate whether or not their software can run in real time. However, making such a WCET estimate manually is challenging, inaccurate and time consuming as there are a lot of factors like I/O speed and clock rate that are dependent on the type of architecture and device used. I under the guidance of Dr Jayaraj Poroor developed a module which considers all these complex factors and does the timing analysis for any embedded program written in the "verticalthings" language at compile time with less than 10% error.

PROJECTS

Mailing List Analysis Bot

October 2018 - November 2018

Tracking a mailing list to keep track of those who are not sending mails regularly manually is a tedious task. To address this problem I developed a python script which uses the Gmail API to collect data, and built a Telegram Bot which is used by the end user to interact with the python script. The end user can get notifications through the bot when particular users send mails and can also get the statistics like the no of mails sent by a particular user/group to the mailing list in a period of time.

IOT Project

August 2018 - December 2018 | Amrita University, Kollam

I along with a team of three built a remote controlled toy car which can be controlled over WiFi using a laptop or by issuing voice commands in a smartphone. This device can be further programmed by the end users to move in a predefined way and to collect sensory data which can be used to analyse the surroundings.

Process Scheduling

March 2018 - May 2018 | Amrita University, Kollam

Implemented the Banker's Algorithm for deadlock avoidance and resource allocation in C Programming Language