Medha S N

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Work

Tally Solutions Pvt. Ltd. 2017-2020

A leading ERP & accounting software made for SME's

- Contributed to a microservice based backend infrastructure. Built and maintained an intra and inter-site communication ABI framework. Experienced in working as part of small teams. Understood and contributed to a proprietary speed and security based protocol. Experienced in using TCP and HTTP.

- Experienced in writing asynchronous, multi-threaded and memory-safe programs and services in C and C++ for developing features, frameworks, ABI and unit test cases. Experienced in design and execution of routing mechanisms, header-based selective node-to-node communication, fail-safe universal timestamps and memory-optimal chunk encoded message parsing. Have experience in working with JSON and other arbitrary payloads

- Have experience in working in Linux environment and thus can comfortably use memory and address sanitization tools like valgrind and libasan and debuggers such as gdb and cgdb. Also used tcpdump, wireshark as part of network analysis. Comfortable working with AWS and most of my projects are deployed on the cloud.

- As a bonus, I have also worked on legacy code and have been a part of major legacy code & repository refactoring which gave me an opportunity to understand legacy code and it's importance better in contary to always freshly developing from scratch.

Waste Segregation tool with deep learning 2017

- The tool detects and classifies objects of an input image into paper, plastic, metal or organic waste

- I helped in the selection of a suitable deep learning model that can be modified to suit the use case. I changed the number of classes and filters in the YOLO object detection model to achieve desired results.

- A study was carried out to analyse the best fit, given the number of images to be used for the training vs. the time duration of the training. I helped in choosing the arbitrary values to carry out the analysis as well as plotting the results using Python plotting libraries and bash shell scripts.

- The tool was hosted on gcloud and ran on an Apache server backend and HTML, CSS, Javascript based webpages for front-end. I handled the setting up of the Apache server, the hosting of the tool on gcloud and the Javascript based timed animations on the project webpage.

Skills/ Tool-kit

C	C++	NodeJS	MongoDB	Go
Linux	AWS	gdb	valgrind	libasan
JMeter	tcpdump	wireshark		
Git	BitBucket	Jira		

Education

Dayananda Sagar College of Engineering 2013-2017

Visvesvaraya Technological University
   B.E. (Computer Science)
   Aggregate: 78%

Vijaya Composite PU College 2010-2013

Karnataka Pre-University Education
   Result: 91.5%

Sudarshan Vidya Mandir 2004-2010

Karnataka Secondary Education & Examination Board
   Result: 97.44%