SHYAM SUDRA

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EDUCATION

- **Gujarat Technological University - Rajkot - (2017 - 2021)**
  Bachelor of Engineering in Computer | **9.38 CGPA**

SKILLS

C | C++ | **Python** | **Networking** | **SONiC** | **Spytest** | Linux | Docker | **HTML-CSS-JS** | **ReactJS** | Figma

WORK EXPERIENCE

Celestica | Associate Engineer Software/Control Design **Dec'21 - Present**

- Worked on various projects mainly covering networking protocols and building an automation infrastructure to verify the networking protocol and hardware aspects of different switches.

PROJECTS

1) **Infrastructure Orchestration for Hardware Automation.**

- Independently orchestrated the implementation of automated hardware testing infrastructure. This encompassed the **automation of the oscilloscope, waveform generator, thermal chamber, and Device Under Test (DUT)** functionality, leading to an impressive **80% reduction in operational overhead** for the hardware testing team.
- **Tools/Technologies:** Python, Pytest, PyVisa, PySerial, Paramiko

2) **Automated Networking Protocols for SONiC (ACL, Sflow & BGP)**

- Carried out the **manual and automation of networking protocol in SONiC**, including Access Control Lists **(ACL)**, Sflow, and Border Gateway Protocol **(BGP)** using open-source **Spytest automation framework to execute comprehensive testing**, ensuring optimal functionality. Scripted libraries for different BGP & Sflow functionalities that were not there in the Spytest; e.g.: BGP Nexthop & BGP Memory check etc.
- **Tools/Technologies:** Python, Pytest, Paramiko, Spytest, IXNetwork, IxExplorer

3) **Advanced CPLD Testing and Issue Mitigation.**

- Conducted CPLD testing across various white-box switches, yielding precise testing results. These results **facilitated the hardware team in promptly addressing issues** within a mere **two-week timeframe**.

4) **Qualification of different Celestica's 400G & 800G platforms.**

- Conducted protocol and throughput testing for Celestica's switches.

5) **Platform Validation with ONL (Open Network Linux)**

- Executed **platform testing on Celestica switches utilizing ONL (Open Network Linux)**, which covered tests related to **fan and PSU**.

6) **Lab Network Establishment and Diagnostics.**

- Actively contributed to the **establishment of the lab network**, taking charge of **debugging and swiftly resolving any network-related challenges** that arose.

7) **Lab Reservation Tool.**

- Created a lab reservation tool for Celestica's internal usage that **included topology details and reservation functionality** for sharing across different teams.

PERSONAL PROJECTS

1) **BeatCode - A Leetcode clone** (Link to the site) (Link to GitHub)

- Built a Leetcode clone to practice coding questions which has code-compilation capability in 5 languages (Python3, C, C++, JAVA & Kotlin).
- **Tools/Technologies:** ReactJS, HTML-CSS-JS.

2) **ChatApp - A WhatsApp clone** (Link to the site) (Link to GitHub)

- Created a WhatsApp-like live chat application with a real-time database where users can register and chat with other users.
- **Tools/Technologies:** ReactJS, HTML-CSS-JS, Firebase.

PERSONAL DETAILS

- Date Of Birth: 31st Oct 1999
- Marital Status: Single
- Passport Number: U6636730

HOBBIES & INTERESTS

1) Part of the team that gives training for technical interviews at CEG, Chennai. (Link to Certificate)
2) Sketching and Painting.