ESHWAR N KUMAR

• eshwar2795@gmail.com • +91-9738543573 • eshwar-kumar.web.app • linkedin.com/in/eshwarnkumar • github.com/EshwarNK

EDUCATION

University at Buffalo, State University of New York — New York, USA
Master of Science in Computer Science & Engineering — August 2020 - February 2022
Coursework: Analysis of Algorithms (Fall 2020)

Visvesvaraya Technological University — Bangalore, India
Bachelor of Engineering in Electronics & Communication (GPA: 3.57/4.0) — August 2013 - July 2017
Coursework: Computer Communication Networks, Data Structures and Algorithms, Operating Systems, Computer Concepts and Programming

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, C++, HTML/CSS, JavaScript
- **DBMS:** MySQL, MongoDB, ELK Stack, Postgres
- **Frameworks:** SpringBoot, AngularJS, Flask, RESTful Web Services
- **Cloud Technologies:** Docker, Kubernetes, AWS
- **Data Science:** Pandas, Keras, TensorFlow
- **DevOps:** CI/CD, Jenkins, CircleCI
- **Others:** Git, Bitbucket, Agile/Scrum, Eclipse, PyCharm, Spring Tool Suite

PROFESSIONAL EXPERIENCE

CISCO SYSTEMS | FULL STACK SOFTWARE ENGINEER (CX-Customer Experience) | Bangalore, India — August 2019 – August 2020

(Technologies Used: Java, SpringBoot, REST, MySQL, AngularJS)

- **Asset Groups:** Designed and Developed a Microservice that can help customers easily classify their products by creating their groups based on factors like location, product type, etc. during the onboarding stage of a customer to the Customer Portal.
- **User-Initiated Scan:** Developed a microservice with the help of which customers can manually initiate a vulnerability scan for one or more devices from the UI based on the requirement.
- **Automated Elastic Search Index Deployment (AEID):** Created a docker image that pulls the latest code from bitbucket repository and deploys the indices all the Microservices present as a part Customer Portal to Elastic Search. It runs as an init container in a Kubernetes cluster, saving more than 40% of the time taken by the DevOps team to make deployments during release.

CISCO SYSTEMS | SOFTWARE DEVELOPMENT ENGINEER I (Webex Meetings) | Bangalore, India — August 2017 – July 2019

(Technologies Used: Python, Flask, Docker, InfluxDB, DevOps)

- **CMR Analyzer:** Designed and Developed a highly scalable dockerized service called Cisco Meeting Room(CMR) Analyzer that helps test engineers across the globe to resolve pager calls with minimal human intervention, thereby reducing the average turnaround time of pager alerts by 50%.
- **Jira Bot:** Designed and Developed an NLP based ChatBot, which takes input (meeting details) from the user and collects the debug information, analyzes the data and creates a Jira issue if required.
- **CMR Infrastructure Validator:** The tool built using python libraries such as paramiko, pexpect ensures that all the infrastructure present in the resource application is in perfect working condition. It notifies the team and blocks the faulty devices from being used by the tests to minimize the number of pager alerts which occur due to poor infrastructure.
- **Micro-Services Health Check Monitor:** Developed a tool that continuously monitors the health of 54 microservices and immediately posts back the status of the non-active ones to a Teams Space.

CISCO SYSTEMS | SOFTWARE ENGINEERING INTERN (Service Provider Routing) | Bangalore, India — January 2017 – June 2017

(Technologies Used: Python, PyATS, NCS4k, FireX)

- **NCS4k Single/Multi Chassis Unit Test Automation**: NCS4k (Network Convergence System four thousand) is a router completely developed by Cisco. As a backend engineer, I wrote scripts in Python and performed Unit Testing to automate approximately 80% of the test cases. The team is using these scripts rigorously to verify the functionalities of the router and to find bugs in the software at a faster rate.

DEFENCE RESEARCH & DEVELOPMENT ORGANIZATION | RESEARCH INTERN | Bangalore, India — January 2016 – February 2016

- Being a part of the Defence Avionics Research Establishment (DARE) team, I received an opportunity to gain knowledge on the working of Electronic Warfare Systems and the practical applications of RADARs and LIDARs in these systems.

ACADEMIC PROJECTS & PUBLICATIONS

Performance Study of LTE Scheduling algorithms | C++, ns3(Network Simulator 3rd version) — **March 2016 – May 2016**

- Analyzed the performance of Long Term Evolution(LTE) scheduling algorithms such as Round Robin, Proportional Fair, Maximum Throughput, and Blind Equal Throughput in a multicellular network on the impact of handover. Based on the simulation performed using an open-source tool called ns3, I was able to conclude that the Round Robin Scheduling algorithm provides the least latency and the highest system throughput when compared to the others.
- Published the research work done during the project in the International Journal of Advanced Research in Electrical, Electronics, and Instrumentation Engineering (IJAREEIE) journal. (Link)

CERTIFICATIONS, AWARDS, AND EXTRACURRICULAR ACTIVITIES

- Oracle Certified Java Associate
- 3 Cisco "You Inspire" Awards
- Speaker - Cisco - Vani Toastmasters Club
- Organizer - Give Away activity for the kids in Parikrma NGO
- Organizer - IoT & Line follower robot workshop at Cisco and Bangalore Institute of Technology
- State 20th rank (95.33% overall marks and 100/100 in Chemistry) - 2nd Pre-University Examination, Recipient - MHRD National Level Scholarship
- Hobbies - Bike Riding, Skateboarding, Drawing, Cricket, Reading Books & Magazines