Resume Analysis

Resume-TirthankarMittra uploaded on
February 12th at 11:05 PM

General Overview

Points

0

-3

Lost	Amount	Points
Flags	0	0
Improvements	3	-3

Breakdown

Analysis	Your score	Highest score in your division
General	70	80
Formatting	70	70
Content	149	250

Analysis

General

1

Type	Category	Recommendation
Improvement	General	Number of pages Your resume contains more pages than recommended. Other peers at your university with similar experience and level of degree have 1 page resumes. Quinn suggests you revise it down to 1.

Formatting

1

Type	Category	Recommendation
Improvement	Formatting	Repeated Words The word is used a few times. It would be best to vary a bit and provide a synonym. If it's not industry specific and relevant, using the same word over and over can imply a lack of effort. Brainstorm or use a thesaurus to freshen up your language a bit.

2

Type	Category	Recommendation
Improvement	Formatting	Repeated Words The word is used a few times. It would be best to vary a bit and provide a synonym. If it's not industry specific and relevant, using the same word over and over can imply a lack of effort. Brainstorm or use a thesaurus to freshen up your language a bit.

Content

Tirthankar Mittra

Software Engineer Experience delivering products used by 100M+ users.

United States tirthankarmittra@gmail.com 7202515129 https://www.linkedin.com/in/tirthankar-mittra-9606889a/

https://github.com/tirthankar95

EDUCATION

UNIVERSITY OF COLORADO BOULDER - Boulder, CO August 2022 – December 2023

Master of Science in Computer Science

GPA: 4

Relevant coursework: Data Center Scale Computing, Linux system administration, Computer Security and Ethical Hacking, Neural Networks & Deep Learning, Deep Reinforcement Learning, Advanced Robotics, Chaotic Dynamics, Numerical Linear Algebra, Foundations of Quantum Engineering, Advanced topics in Computer Vision.

JADAVPUR UNIVERSITY - Kolkata, India, ranked 9th in engineering ~ 2017 HRD ministry report August 2014 – May 2018

Bachelor of Engineering in Electronics & Telecommunication

GPA: 3.6

Relevant coursework: Computer Language & Data Structures, Numerical Analysis Lab, Data Structures & Algorithms, Computer Organization & Architecture, System Software, Computer Comm. Networks, Neuro-fuzzy Control, Operating Systems, System Software.

TECHNICAL SKILLS

Functional : Agile, JIRA , Git, Gerrit, Jenkins, Perforce, Linux, Windows, CI/CD.
Technical : Python, C, C++, JAVA, HTML, CSS, PHP, Apache2, Computer Vision, NLP, Reinforcement Learning, Machine Learning, Large Language Models, Deep Learning, Hadoop, PySpark, Docker Container, Kubernetes, Google Cloud Platform, PyCuda, ROS, System Design, REST, AWS, Computer Networks, Cyber Security, RabbitMQ, Flask, gRPC, Operating Systems, Algorithm & Data Structure, Redis, MinIO object store, MySQL, Pytorch, GDB, TensorFlow, Node.js, JavaScript, Database, NoSQL, Spring framework.
Framework : Spring Boot, Pytest, Gtest.
Machine Learning : Pytorch, Tensorflow, Large Language Model, Computer Vision.

PROFESSIONAL EXPERIENCE

QUALCOMM - SAN DIEGO, CALIFORNIA May 2023 – August 2023

Interim Software Engineer

- **Led the development of a PYTEST framework** verification environment for rigorous testing of the 5G base station's MAC layer. Established a prototype unit test and development workflow, laying the foundation for future test case expansions. **Utilized Python LOGGING and SUBPROCESS module**s and deepened expertise in **GIT and GERRIT** version control systems. The framework resulted in a 30% enhancement in testing efficiency.
- Collaborated seamlessly with cross-functional higher-layer teams within the 5G network protocol stack to develop MAC unit test cases. **Enabled PF TRACE for unit tests** to log MALLOC counts, CONTEXT SWITCHES, and PAGE FAULTS; this increased the reliability of all test cases by 25%.
- Performed **data analysis with Python's PANDAS and NUMPY packages** to formulate robust pass-fail criteria for unit tests. Implemented extended test scenarios by creating bash scripts, identifying latent faults in legacy code, and fixing them, thus increasing code reliability by 5%.

SAMSUNG R&D - BANGALORE, INDIA June 2018 – August 2022

Lead Software Engineer

- **Led the development of 5G Base Station's** physical uplink control channel's **feature releases and patches for Samsung's diverse customer base**. Also, customized features for specific clients based on High-Level Designs and 3GPP specifications, following **agile workflow**, continuous integration, and continuous development **(CI/CD) practices**. **Mentored two junior team members** in MAC-PHY software development; all these efforts reduced the team's ability to release new software features by 30%.
- **Improved log comprehension** and accessibility by developing an **HTML, CSS, and JAVASCRIPT-based parser** that was hosted on a server and could aggregate logs of a specific type into a downloadable Excel sheet which could then be utilized for analysis such as calculating DOWNLINK BLER and throughput, the log parser reduced the average analysis time by 90%.
- **Implemented PUCCH unit tests powered by Google's Gtest in C++** and set up Jenkins for nightly testing, which included the logging of CPU cycle consumption per module**. Automated email notifications for team-wide updates on results**, enhancing overall testing efficiency. The framework reduced bugs by 50% and was also used to increase code coverage from 20% to 75%.
- **Led pioneering research** in advancing **5G algorithms through MACHINE LEARNING** techniques. Developed an **improved LDPC layered decoder using Pytorch**, incorporating reinforcement learning and a dense neural network for function approximation which