Krishnakumar Muthukrishnan

165, Niagara Falls Blvd, Buffalo, New York-14226, USA



Summary:

A seasoned developer with 5+ years of experience in C, C++, Python on UNIX, and Linux platforms. Fully conversant with Software Development Life Cycle (SDLC). Well versed with Agile, Scrum and Waterfall methodologies. In-depth knowledge with Object Oriented Programming and design techniques. Demonstrated ability to communicate and work with senior management, associates, and customers. Strong problem solving and technical skills coupled with innovative mindset. (***Click here for detailed profile)

Experience:

2019-07 - 2021-05	Information Technology Analyst	
	Tata Consultancy Services, Chennai, India	
	Project:- Alcatel-Lucent Enterprise(ALE)	

- Good understanding of OSI Model, TCP/IP protocol suite (IP,ARP,TCP,UDP,SMTP,FTP and TFTP). And IP Telephony services.
- POCO-C++ class libraries and frameworks for building network- and internet-based applications.
- Strong knowledge and experience in Oracle 10g/11g database programming using SQL, PL/SQL.
- Used Oracle C++ Call Interface (OCCI) to use the object-oriented features, native classes, and methods of the C++ programing language to access the Oracle database,
- Developed Python APIs to dump the array structures in the processor at the failure point for debugging.
- Implemented dev automation in Python using Docker, Jenkins CI and test automation tools
- Worked in AWS environment, instrumental in utilizing Computer Services (EC2,ELB), Storage services (S3,Glacier,Block storage, Lifecycle Management Policies) Cloud Formation (JSON templates), Elastic Beanstalk, Lambda, VPC, RDS, Trusted Advisor and cloud watch.
- Scripting and (Linux) machine provisioning using bash and the Python AWS-SDK.
- Minimal exposure into 'Make' file creation.

2015-06 - 2019-06	Software Engineer Tata Consultancy Services, Chennai, India Project:- Alcatel-Lucent Enterprise(ALE)
	1 Toject Alcater-Euternt Einter prise(AEE)

- Utilized C++ templates, OO Design patterns for PABX features development.
- Experience in developing C++ services using web services architecture REST and XML.
- Expertise in designing, developing middleware components and applications for software in C/C++ using data structures, IPC(TCP/IP socket programming) and design patterns.
- Utilized C++, BDE, STL, and thread pool to achieve optimal design efficiency.
- Worked on several python packages like numpy, scipy, pytables etc.
- Wrote Python scripts to parse XML documents and load the data in database.
- Developed and designed backend modules using Python , Django WebFramework.
- Used CI/CD tools Jenkins, Git/Gitlabs, Jira and Docker registry/daemon for configuration management and automation.
- Excellent experience in coordinating and implementing the activities planned with the Onsite/Offshore Development teams and Delivering within the stipulated time frame.

Education:

Degree - Master of Science - Computer Science & Engineering.

Location - State University of New York - Buffalo, New York.

- Expected graduation 12/2022
- CGPA 3.29
- Course Work (***click here for complete list)

Degree - Bachelor of Technology - Information Technology.

Location - Thiagarajar College of Engineering, Anna University, India.

- Graduation 04-2015
- CGPA 3.33

Skills (***click here for detailed view)

Proficient in Development Languages	: C, C++,, ReactJS/React-Native, HTML,CSS		
Efficient and effective in using Scripting languages	: Python, Javascript, GNU Bash		
Adept in database skills	: SQL, Oracle , Firebase		
Familiar with	: Java , Solidity		
Protocols	: TCP/IP,UDP,HTTPS,SNMP,DHCP,RTP ,SSL/TLS, DTLS.		
Framework / Libraries /API	: OpenMP, OpenMPI, PySpark, Pandas, Numpy, POCO, MVC, STL,BOOST, Django, OCCI, REST		
Platforms & Virtualization	: Windows, Unix, Linux, VmWare, KVM		
Tools	: VScode , Remix, GitHub, Mercurial, Jenkins, Putty, WinSCP, Wireshark, Android studio, JIRA, VmWare Esxi, KVM Manager, Klocwork Analyser, Docker, AWS, gdb, valgrind		
Leadership	: Lead multiple small scale development activities over the span of 5+ years.		
Misc	: Basic switch & Router configurations, Server maintenance from Bare Metal state, IP routing table maintenance.		

Other diverse Projects: (*** click here for elaborate view)

- i. (TCS-ALE) DTLS based End-to-End Security Architecture.
- ii. (TCS-ALE) Cloud migration of legacy PABX system.
- iii. (TCS-ALE) IPv4<==>IPv6 signaling translator.
- iv. (UB-CSE) Server-client webchat application.
- v. (UB-CSE) LUCID Vending Mobile Application.(Android & IOS)
- vi. (UB-CSE) Minor Academic Projects. AI/ML, High Performance Computing, Networks