C++ Software Engineer C++ Software Engineer - Eaton Corporation Franksville, WI \* Experience in client/server, multi-threaded, distributed and Platform applications as well as web service applications using technologies like C++, C, JavaScript, Python, SQL Server, TCP/IP, UNIX, LINUX and Windows \* Experience in SQL Query, XML, API and Pro-C and scripting languages like Python, Shell Scripts \* Expert in developing Algorithms using libraries like STL, BOOST, CAA, MFC and Data Structures. \* Experience in creating UML Diagrams, Design diagrams like sequence and class diagrams. \* Experienced in operational systems incident management, root cause analysis and application/product performance management. \* Experience in MySQL, Oracle and Versant, RDBMS. \* Experience in Development of Project Plan, Software Design Document and Validation Plan. \* Experience in working Automated Testing methods. \* Experience in Agile/Scrum Methodology. \* Good working experience with GIT and ClearCase. \* Development experience with XML, JSON, TCP/IP, UDP/IP and multithreaded application using IPC mechanism. \* Good experience with JENKINS and other build environment tools. \* Expert in creating complex SQL Queries, Sub Queries, Hierarchal Queries, PL/SQL, Packages, Cursors, Functions, Stored procedures, Triggers, Exception handling, transaction control and xml generation. \* Collaborate with management to improve & customize reports related to production support. \* Expertise in developing Macros in C/C++, templates. \* Experienced in developing web-based applications using Python, Django, CSS, HTML, XML, DHTML, SOAP, JavaScript and JQuery \* Proficient at debugging code. Acted as second and third level support at various positions. \* Experience with Debugger Tools such as DBX, GDB and static analysis tools like Coverity, CppCheck, and PyLint. \* Experience in Cloud Integration process for configuring multiple application programs to share data in cloud. \* Applied knowledge of machine-learning, data science, algorithms and associated tools. \* Expert in network programming skills including both TCP/IP and UDP. \* Experience of OO design and end-to-end software development. Experience working on Data Structures and implementing mathematical models. \* Excellent communication skills, hardworking and a very good team worker. Work Experience C++ Software Engineer Eaton Corporation July 2018 to Present Responsibilities:

<sup>\*</sup> Designing and developing Lighting and Recloser control applications on Linux platform in a

Scrum/Agile environment. \* Involved in the complete SDLC ( Software Development Life Cycle) process of the project development. \* Analyzing and assessing customer specifications and developing software requirements. \* Estimation of the effort and planning for the software development activities. \* Translated customer business requirements into formal Technical design documents, establish specific solutions, and leading the efforts including programming and testing that culminate in client acceptance of the results \* Coding the application logic as per the requirements by applying and following coding standards and techniques. \* Written code in Python, Shell scripts and C++. \* Involved in preparing and writing the user manual for the designed applications with the usage and functional details. \* Involved in writing Quick Fix related bash shell Scripts as well as participated in Quick Fix release process. \* Provided on Call Support for Critical Production Problems. \* Co-ordinating with End Users with version releases. \* Involved in Peer review activity for the software requirements implemented and written by the team members. \* Participated in Unit testing Activities for the implemented source code. Environment: Linux, C++, Python, Shell Scripting, JSON, SQLite, Bamboo, Py-Test, VI Editor, Web Services, Web Sockets, IOT, Visual Studio, Confluence, GIT, and Jira. C++ Software Engineer GE Transportation, FL May 2017 to June 2018 Responsibilities: \* Designing and developing server-side applications on Linux platform in a fast-paced Scrum/Agile environment. \* Applied principles of SDLC and methodologies like Lean/Agile/XP, CI, Software and Product Security, Scalability, Documentation Practices, Refactoring and Testing techniques. \* Translated customer business requirements into formal Technical design documents, establish specific solutions, and leading the efforts including programming and testing that culminate in client acceptance of the results. \* Worked on core data structures and algorithms and implemented them in C++. \* Contributed and supported process improvements, which guide the development, sustaining & support activities of the product. \* Analyzed performance parameters and assessed application performance \* Developed Functional Requirement Document based on users' requirement. \* Implemented different design patterns such as singleton, Factory, MVC, Business delegate, session facade and DAO design patterns. \* Developed applications utilizing both relational databases such as Oracle and object-oriented databases such as Versant. \* Involved in the development of SQL, PL/SQL Packages, Stored Procedures. \* Developed code using communication frameworks in C++ such as CORBA and transaction management software such as Tuxedo. \* Involved in resolving bugs post production and resolved performance issues. \* Participated in Peer reviews of the Design and Source Code (C++, and Shell Scripts). \* Participated in Scrum meetings such sprint planning, sprint retrospective, sprint review meetings. \* Analyzing data exchange between Java (Client) and C++(Server) and figuring out technical debts in the system for improvements. \* Developed Unit Test framework to unit test all the incoming and outgoing XML messages. \* Developed new tools and utilities in C++ to be used by deployment team. \* Enhanced Python scripts to analyze the application logs on daily basis and report any anomaly. \* Developed Unix Shell (Bash) & Python scripts for various Systems Administration tasks to automate repeated processes. \* Refactored existing code by introducing inheritance-based design. \* Improved the code efficiency by optimizing the code and caching frequently used data. \* Utilized STL and C++ algorithms to achieve optimal design efficiency. Environment: Linux, C++, JAVA, Python, Shell Scripting, JMS, XML, XSL, Corba, Oracle, Versant, Jenkins, Log4j, VI Editor, JBOSS, WebLogic, Tuxedo, JSON, ECLIPSE, Confluence, ClearCase, GIT, and Rally. Sr. C++ Developer HP, CA December 2015 to April 2017 Responsibilities: \* As a part of research team, I was involved in gathering information, data and samples to test them and find the best data structure, algorithm or library to use for the requirement. \* Developed (Proof of Concept) POC's for various requirements from clients as initial phase of project for various teams in the company. \* Modified C++ programs to support compliance rule automation for many compliance rules for client accounts for both pre-and post-trade compliance purposes and manage leverage using many metrics like industry exposure, security type, long/short positions, currency / securities / options / futures, credit ratings etc. \* Developed SOAP web services for order and trade related information to display on UI. Used proprietary MQ to subscribe to order and trade updates. \* Used STL extensively to store data on Order history, accounts, securities, etc. for fast retrieval/update. \* Developed Application that would allow transfer of log files from Linux computer to Linux server using C++ multithreading environment. \* Implemented unit test mechanisms to discover Software

defects. \* Optimization and Performance tuning using MY SQL Profiler, Performance Monitor. \* Used STL containers, algorithms, various data structures and design patterns in software design like Singleton for db connections & Observer pattern for processing events. \* Wrote Oracle stored procedures to compute several metrics like realized/unrealized gain/loss, forex rate effect etc. from historical data considering forex rate effect \* Extensive use of core Java Collections, Generics, Exception Handling, and Design Patterns for functionality, such as portfolio summary and user information. \* Used Python scripts for maintenance tasks. \* Implemented Agile/Scrum software development methodologies on customer collaboration for continuous requirement of customer-stakeholder involvement. \* Fetching raw data and turning out actionable insight using Spotfire tool for advanced reporting and powerful visualization to help executives and analysts for concurrent decisions. \* Developed an in-house tool using shell scripting to make the day-to-day developer operations like pulling code from latest branch automatically, checking latest labels in code, copying libraries from development environment to test environment, scripts that helps product users to simulate the error and create necessary logs. Environment: C, C++, STL, Linux, g++, gcc, gdb, Tuxedo, multithreading, MY SQL, LAMP, ROS, Agile/Scrum, OpenCV, OpenCL, Spotfire, CUDA, STB, research, VC++/MFC. C++ Developer USAA, TX February 2013 to November 2015 Responsibilities: \* Extensively worked on design, development and testing of HMI (Human Machine Interface), Guidance and Performance Prediction modules. \* Responsible for the management of schedule, milestones and deadlines as well as the technical aspects for the development of research functions. \* Shared the ideas to meet the future market demands for the existing and new products. And, created the open platform discussions within the organizations for ideas sharing and brainstorming. \* Reviewed codes in Shell Script, Python, C++, PL/SQL & T-SQL; created subprograms, procedures and functions, DB triggers, cursors and optimization techniques for T-SQL. \* Led the migration of historical data to client; fine-tuned SQL & database, generated reports for management, etc. \* Responsible for Development/Enhancement, bug fixing as well as Production Support. Involved in writing PL/SQL part depends upon user requirements. \* Analyzing, designing and implementing change requests for the C/C++ \* Developed on simulation software for

network connections and routers using C and C++. \* Leading end to end execution of project involving review of Shell/Python scripts in order to automate systems. \* Producing stage plans, highlight reports, risk logs, requests for change etc \* Providing support for C, templates and undertaking testing. \* Managing changes and incidents; raising incident and problem tickets. \* Involved in defect fixing & issue resolution. \* Co-ordinating with Release Management Team for Migrations, Queries \* Provided On Call Support for Critical Timelines Defects. \* Responsible for Sql/Pl-Sql Queries and coordinating the DBA teams with new DB requirements/Setup. \* Key member for Automation of the system. \* Responsible for project lifecycle documentation and day to day status reports. \* Provide Guidelines/Instructions to QA/UAT teams for Migrations, Queries. \* Designed role-based access control desktop application for monitoring using C++. \* Development of the message communication using Message BUS. \* Responsible for project lifecycle documentation and day to day status reports. \* Maintaining Quality measures as per the agreement Environment: C, C++, Unix, Linux, Python, Oracle, MySQL, Testing, templates, UML policy Software Engineer Huawei - IN June 2011 to December 2012 Responsibilities: \* Analyzing the customer specifications to develop the software requirements. \* Performing software development activities, which includes Requirement gathering, Design conceptualization, and Coding. \* C++ coding of Models (IVR Programs) in a 3 layer (Frame work, Attributes, Models) architecture application. \* Singleton design pattern as used in the framework. \* Send/receive XML request and response through http protocol. \* Used Curl (Command line URL) concept to send and receive http request. \* This server provides a XML response for the XML request which acts as a dummy server. \* Developed a C++ application by creating a class for each application. Each application use the functionalities of framework Preparing program, unit test specifications and system test plan for the components \* Unit testing the programs for correctness against the requirements and completeness using test coverage analyzer. \* Managing the configuration and controlling the code version using subversion \* Ensuring the compliance to the development processes and methods. \* Ensuring the deliveries within defined time, cost and quality. \* Analyzing the issue raised either during testing campaigns or in-service usage. \* Providing technical support to new team members.

\* Worked with users from requirement gathering to the final delivery of the product, support and rollout. \* Analyzed, Designed and modified multithreaded applications to support guest loyalty program, seapass cards and revenue management. \* Enhanced C++ code to manage revenue information onboard for both crew and guests. \* Used STL components like containers, iterators, function objects and algorithms in applications. \* Used sockets for communication with vendor API for POS systems \* Used SVN for source code control. \* Modified & tested scalable, multithreaded, high throughput C++ programs. \* Modified existing multithreaded server infrastructure to push additional indicative information to downstream subscribers. \* Implemented additional validation logic for a rule engine server that checked for logical inconsistencies in indicative data and reported them in a user workflow using C++, STL and multithreading. \* Optimized design and code for high performance and fixed various bugs. \* Used various data structures/design patterns like Observer, Singleton, Facade in software design. \* Used C++ interface/SQL to update/retrieve information from Unix, AIX, Linux, g++, gcc, Python, pdb, Shell Scripting, IBM DB2, Oracle, SVN, event handlers, Observer Pattern, multithreading, thread pools, IPC, gpg encryption, gdb, dbx. Skills C++, Design patterns, Git, Jenkins, Oop, Python, Scripting, Aix, Linux, Red hat, Shell scripting, Solaris, Sun, Microsoft sql server, Sql server, Oracle, Sql, Sqlite, Ood, Software design Additional Information Programming Languages & Scripts C, C++, Python, Java, Java Scripting, TECHNICAL SKILLS: Shell Scripting. Operating Systems UBUNTU, RED HAT ENTERPRISE LINUX, SUN SOLARIS, IBM AIX, WINDOWS 2008 SERVER, OS X. Version Control GIT, ClearCase. Protocols TCP/IP, UDP, CAN, SNMP, KWP2000, LIN, RS 232, GMLAN, KWP. Databases MY SQL, Oracle, Microsoft SQL Server, ORA 10G, SQLITE, NO SQL, MONGODB, Versant. Libraries & Frameworks STL, BDE, IPC, multithreading, sockets, heap allocators, signals/event handling, SOAP webservices, Software Design OOP/OOD, Design Patterns, Google Test, Google Mock, Quick FIX. Tools PDB, DBX, GDB, GIT, ClearCase, Jenkins, Ant, Maven, Google Test, Google Mock, Cpp Unit, Coverity, Jira, Rally, Splunk, Kibana, UML Tools, Eclipse, MS-Office, CANoe, CANdela, REDIS.

Name: Aaron Odonnell

Email: clewis@example.org

Phone: 793-539-4601x53280