Principal Lead Engineer Principal Lead Engineer Principal Lead Engineer - Third Insight Austin, TX

Technical engineer offering vast software engineering experience across wide range of platforms, development languages and different company environments focused on delivering highly effective and creative solutions to business and technology challenges. Focused on working in an entrepreneurial environment to deliver successful solutions to companies while delivering complex technology, business and process improvement solutions. Experienced in developing with and managing all aspects of software development life cycle, from initial requirements through development, testing, delivery and enhancement. Emphasized building, training and mentoring high-performing teams to deliver strategic software projects, develop and implement business impactful processes. Utilized communication with both senior management and customers to shape development of product focus and requirements, to align delivery of software projects with both internal and external customer needs. Authorized to work in the US for any employer Work Experience Principal Lead Engineer Third Insight June 2017 to Present Technical engineer responsible for architecture and implementation of custom C++ software integrated with 3rd party open source code into a drone quadcopter software navigation platform. This platform was a set of software applications allowing interactions with a drone quadcopter's autopilot, and drone navigation. The platform allowed for receiving sensor input from autopilot, IMU, onboard camera and other sensors to ascertain the drone position and develop a navigation path to reach specified goal.

- Integrated computer vision applications on OpenCV, ArrayFire and Caffe for processing of camera images, object detection and classification. Integrated open source computer vision SLAM packages in real world (external or onboard drone camera sensors) and simulated environments (AirSim, Gazebo). - Implemented Linux OS configuration/setup on both x86_64 and ARM64 (Nvidia Jetson) for bare metal, Docker and cloud based environments. - Developed transparent communications layer based on Google's GRPC and extended with a ROS pubsub style interface for communication between application subsystems to in-process, out of process and between machine communications. - Developed CMake build system for all application subsystems and 30+ internally compiled source dependencies. - Integrated or ported as required ROS (Robot Operating System)

components as needed to enable functionality in the system. - Helping to co-lead a small team providing guidance and mentorship with application architecture, C++ implementation and patterns and best practices for application development. - Helping with the company's corporate product focus, assessing needed feature set and expected deliverables for a Machine Learning software product to be utilized on embedded, edge or cloud based devices. Owner BBlox March 2016 to Present Creating, developing and enabling solutions for clients across a wide range of platforms to meet the client need in solving their problem or increase return on investment. - iOS and Android full service product life cycle development from implementation (Objective-C, Swift and Java) through deployment in respective marketplaces. - Qt/C++ development for Linux device x64 platform in the embedded instrument space. Architected and implemented an embedded Linux data acquisition and control service for a multi-client high speed GC-MS - DevOps deployment and operations with and without Docker for HIPAA compliant hosting of web applications. - Website prototype based on JavaScript with a React UI SPA web app and Go REST interfaces server for sending SMS and application messages. Principal Lead Engineer Remedy Urgent Care October 2016 to July 2017 Building the technology department for a Healthcare startup. Assessing the needs of the startup, determining and developing the technical abilities of the company within the budget constraints. Hired and managed a small team, to build and run applications for day-to-day operations. Planned for future growth and managed the expansion through external vendors and onsite staff. - Python Flask development of website for HIPAA compliant patient scheduling and medical practice management website. Database functionality implemented with Postgres and hosted on Docker. - Managed and implemented the DevOps processes around maintaining the custom web app and external website. Director of Engineering, Sr iOS Developer, Sr Android Developer, Python Server Developer DocbookMD July 2012 to March 2016 Manager and Development Lead for DocbookMD. Planning and Architecture of the DocbookMD Mobile App (iOS/Android) and Server (Django/ Python) components. Working on mentoring, product planning and feature requirements of the overall solution. Worked closely with executive and sales teams to understand the business needs and established a tactical as well as strategic product feature

roadmap. - IOS application in Objective-C and an Android application in Java, communicating to a server backend via JSON/REST interface, caching data in CoreData and SQLite. Application functionality was a display and download of directory of Physicians, with fully HIPAA compliant secure messaging abilities with attachments. - Python Django server application supporting REST interfaces to enable interactions with mobile apps for directory of Physicians and a fully HIPAA complaint secure messaging platform. Database functionality implemented with MySQL. - DevOps deployment and operations on a high-availability cloud-based architecture for the application maintaining greater than 99.9% uptime. Leverage Bash and Python Fabric scripts for deployment and systems management. Architect, Sr Developer The BHW Group May 2011 to April 2012 Web application development of new and modification to existing private and public web service interfaces for a large existing application. Enhanced the existing code to support newer standards while enabling a transition of older clients to the new standards. Implemented ASP.Net MVC web applications to automate business processes and provide a web-based JavaScript UI for systems, which were not previously web-enabled. - ASP.Net MVC, WCF, Json, C#, JavaScript, SQL Server Sr Developer Federal Reserve - Board of Governors June 2006 to May 2011 Worked as part of a team to develop applications in support of functions of the Federal Reserve Board of Governors mission. Worked in all phases of the application development process. As part of the implementation team we leveraged existing software assets to better map and enhance existing software functionality to the unique needs of the Federal Reserve. Application development included but was not limited to Web application/services development with C#, ASP.Net, SharePoint, JavaScript, WinForms, SQL Server Architect, Sr Developer BearingPoint September 2004 to May 2006 Worked as part of the team to architect and implement the "EFiling for Courts" web application for the State of Texas. Designed and implemented business components, document services, and application infrastructure services in support of the application and required functionality. Provided technical leadership in development process, build process and unit testing. Helped to refactor existing code base into common components and application code to leverage greater reusability of common code. Helped present and evangelize unit-testing practices while introducing and integrating into

continuous integration methodologies with the current development process - C#, Xml, ASP.Net, Web Services, MSMQ, COM+, SQL Server Dell Computer - Contractor Spherion May 2004 to September 2004 to help develop Line of Business applications. Worked on transferring of .Net C# best practices for use in current code development to the development group. Sr. Consultant Microsoft Consulting Services June 1997 to February 2004 Consulted on varied engagements leveraging Microsoft technologies across all facets of Microsoft server and desktop products. Extensive experience consulting and interacting with enterprise customers to listen, understand, assess, recommend, and implement solutions that fit their unique needs. Focused on architecting and developing solutions utilizing Microsoft technologies with C#, ASP.Net, WCF, SQL Server, JavaScript, C++, XML, COM+ Education Some college Skills JAVASCRIPT (3 years), C# (9 years), C++ (5 years), ANDROID (6 years), IOS (6 years), Qt (1 year), Linux (5 years), Python (4 years) Additional Information Technical Skills Experience in: C++, Linux, Windows, Qt, Docker, Python, CMake, ROS, iOS, Android, AWS, Objective-C, C#, Java, JavaScript, Go

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