

C. Wing Ho

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PROFESSIONAL OBJECTIVES Seeking Python full stack developer or AI/ML DevOp position

QUALIFICATIONS IT professional with over 20 years of experience working for fortune 500 companies in full cycle software development from conceptual initiation, planning, high-level design, coding, testing, implementing, documentation and maintenance. Specialized in full stack web development, data science DevOp, retail POS (Point of Sales) and Travel industries with various aspects of functionalities including TCP server/client socket programming, credit card transactions, remote server queries for customers information, web-based integrated application-database-communication, software package and framework development using Python, C/C++, Java, Spring boot, JSP, Javascript, perl, WSDL, SOAP, PHP, Oracle, MS SQL Server, MySQL, Postreqs, CSS, XML, XSL and HTML using Eclipse, Visual Studio, Visual Studio Code, IntelliJ running on Azure Cloud, Linux, Windows, VMS/VAX and IBM/Toshiba/4690 OS.

TECHNICAL SKILLS

- ☐ Python, C/C++ and Java for developing various software applications running on Azure Cloud and OS including UNIX/Linux, Windows, VMS/VAX, IBM/Toshiba 4690.
- ☐ Development/Debugging/Deployment on various IDE - Eclipse and IntelliJ for Java, MS Visual Studio, Visual Studio Code, and IBM compiler for C/C++ for Python.
- ☐ Python Django and Flask web server.
- ☐ Azure Platform – Machine Learning, Databricks, Blob, Azure App Service, Azure Functions.
- ☐ Code repository and version control systems – Git/Jira/Jenkins, MS tfs, IBM ClearCase ClearQuest.
- ☐ CICD, Kubernetes and docker, SDLC and modern Agile/Scum methodology.
- ☐ Java/Camel/OSGi/Spring/Maven/Eclipse for implementing Toshiba POS Tech Stack suites for Walmart POS to remote server communications.
- ☐ Java/AWT/Spring/Eclipse for testing core C code changes as part of Salesforce Trust project.
- ☐ Jetty Server for implementing web services and openssl test suites.
- ☐ TCP socket programming for business-to-business network transport layer development.
- ☐ Web application: Python, Django, Flask, Java, JavaScript, JSP, perl, PHP, VB.Net, for various web server and client applications in Java EE and ASP.Net framework.
- ☐ XML, XSL, XSD, CSS for web data representation, formatting, and validation.
- ☐ HTTP for network application layer development
- ☐ Postgres, MS Sql Server, Oracle, PL/SQL, SQL developer, Oracle Form, SQL, SQLplus, MySQL, Toad, ProC, ProFortran for database programming.
- ☐ HTML for web design.
- ☐ DCL (Digital command Language) for various VMS applications.
- ☐ TCL (Transaction Control Language) for front-end terminal display/entry and interface.
- ☐ IDL (Interactive Data Language) for computer graphics representation of scientific data and 3D visualization.

EDUCATION AND PROFESSIONAL AFFILIATION

M.S, Ph. D., University of Alabama. Huntsville, AL.
B. Sc., Imperial College, London University. London, England.

Member of American Physical Society. Associate of Royal College of Science (ARCS).

PROFESSIONAL EXPERIENCE

Senior full stack software Engineer – Epitex Inc for Discover Financial Services (2021 - 2023)

- Develop and maintain a full stack web service with frontend focused on the user experience, supported by a backend system of data storage, retrieval, filtering, sorting, analyzing and displaying for the users.
- On the business's side the web applications provide internal services for Discover's card operations including searching, categorizing, and contacting potential customers by various methods such as regular mail, FedEx, UPS as well as electronics mailing. It also provides a platform for the operation managers to oversee their teams of workers of 3 shifts per 24 hours period to accurately record their daily work load, efficiencies and performance.
- On the technical side, the web application is a Python flask web service running on the clouds provided by the AWS. The frontend is Javascript based, and styled and markup with CSS and HTML in templates provided by python flask Jinja and Bootstrap. Database operation is provided by SQLAlchemy which is a python and ORM based toolkit. The database was initially MySQL run on a mariaDB server, later it was migrated to a PostgreSQL/Snowflake environment.
- Projects (some examples)
 - Developed a color-coded bar chart such that various statistics will be displayed when the cursor is placed on different colors on the bar chart.
 - Created dynamic web pages using tabs like those in a file folder for navigating different mailing workflow such as US mail, FedEx, electronic mail etc.
 - Provided users a way to dynamically add and delete sequences of mailing rolls and reports to managers about defects.
 - Initiated and implemented architecturally a unit and integrated testing methodology for the web application using PyTest.
 - Increase the efficiency of database storage by using Bitwise operations.

Expert software Engineer – JB Hunt data science team (2018 - 2021)

- Principal developer in the collaboration effort between JB Hunt data science team and University of Arkansas computer science neural network team for recommending loads/routes to shippers. Served as architect developer of Python Django web service with apache, Java Tomcat spring boot web service running on Linux, and Microsoft Azure Functions for web APIs. Web master of JB Hunt data science team website. In charge of all data science development such as Python coding standard, code repo, continuous integration, deployment. Serve as principal lead on JB Hunt Transit Service and Transit Vector Engine which run on Windows IIS and C#. Azure Cloud migration to Google Cloud Platform.

Senior developer – US Tech Solutions (2017 - 2018)

Java/Big Data V – Salesforce (2017 - 2018)

Position : C/Java senior developer for frontend/backend Point of Sales system for Salesforce.

Computer languages/systems : C, Java, Oracle, PL/SQL, Linux, Windows, MS Visual Studio 2015 for backend processes, Eclipse Neon for frontend and auto-test framework, Agile/Git/Jira methodology.

Salesforce Trust project – Work through core code repository to look for and fix unsafe code based on report from Checkmarx to ensure memory safe and prevent buffer overflow attack, command

injection, SQL injection, XSS attack etc. Test changes with Java test framework which is a GUI built with AWT that allows full Oracle DB access and message exchange with core C code using TCP.

Sr. software developer and Designer – LJ Smith and Associates for Walmart Inc (2008 – 2017)

Position : Senior developer for Walmart using C/C++ and Java on Toshiba 4690 OS and Windows/IBM debugging platform.

Computer languages/systems : C/C++, Java (Camel/OSGi/Spring/Maven), webservers (WSDL/SOAP), webclients (Jetty), HTTP, TCP/IP Perl, XML, OpenSSL, Linux, Windows, IBM/Toshiba 4690, Eclipse Luna, Rational ClearCase/ClearQuest, Agile/Git/Jira methodology.

Selected projects :

- ☐ SNA Elimination - To convert remote host services communication from legacy IBM Systems Network Architecture to Toshiba Tech Stack controller suites on OSGi/Eclipse platform via ActiveMQ and Toshiba Controller pipe Routing Services.
- ☐ Sam's Steeplechase project - Sam's membership and Master 2-in-1 credit card applications/activation at the checkout registers at Sam's stores.
- ☐ Sam's credit card rebranding - from Discover card to GM card managed by Synchrony bank.
- ☐ Pinless credit card initiation - to allow customers to use credit cards without entering a PIN below certain purchase limit.
- ☐ Jetty Server - complete design and implementation of a Jetty Server from the ground up for performing various simulated remote servers.
- ☐ Walmart POS OpenSSL suite - standardized openSSL suite by eliminating the GSA (General Sales Application) version and using only the platform version.
- ☐ SRM (Store Return Management) - Decline merchandize return/refund based on customer history.
- ☐ POM (Proactive Outreach Management) - Walmart e-mail and text message services for layaway account opening/closing, merchandise add/delete, pickup, and Customer and Good Samaritan payments.
- ☐ India Sam's club A4 receipt project - To replace thermal receipts by A4 invoices using Java code running on the 4690 controllers.
- ☐ SNE (Store Number Expansion) - to increase Walmart 4 digits based store number to 10.
- ☐ KYC (Know Your Customer) project - com layer design and coding for Walmart Money Transfer.
- ☐ UK Walmart (ASDA) challenge 25 - Random ask age related questions and check customer ID for those appear to be under the age 25.
- ☐ CMDM customers database centralization - To allow Walmart CAM (Central America) countries to access customers database to retrieve relevant information for taxing purposes.

Software Engineer – Blockbuster Inc. (2006 – 2008)

Computer languages/systems : C, C++, Linux, VAX/VMS, MySQL, PHP, TCP/IP, HTTP, XML, XSL.

- ❑ Built a web-based testing tool using PHP on an Apache server that runs on a Linux platform to facilitate QA to perform tests by filling web form and translating into HTTP-based messages for communicating with the store computer server.
- ❑ Blockbuster Kiosk project – responsible for the complete design and implementation of the communication link between the Blockbuster TCP socket server and third party vendor (NCR) in-store client kiosks to allow message exchange using C/C++, and HTTP protocol.
- ❑ Blockbuster vendor cards project - Developed API written in C and HTTP to enable Blockbuster stores to sell and remotely activate third party financial, phone, and gift cards.
- ❑ Blockbuster Integrated Customer View Project – Principal designer and engineer of the communication and API software for the Blockbuster POS in the integrating and centralizing the customer database of nationwide stores for customized marketing and loss prevention using C/C++ and Fortran.
- ❑ Blockbuster Total Access project – Integrated Blockbuster Online and store system. Revamped existent in-store client TCP server to solve network traffic bottleneck problem to enable messages to be bundled, extracted, delivered, updated periodically.

Software Developer – American Airlines (1999-2006)

Computer languages/systems : Fortran, SQL, SQLPlus, Oracle, Oracle Form, ProFortran, VAX/VMS,

- ❑ Developed and maintained software for the travel industries – languages used include C, Fortran, SQL, DCL, Oracle, Java, XML, ASP, VB script, Visual Basic and Sabre.
- ❑ Established communication link between American Airlines Vacations (AAV) and Avis Car Rental using TCP/IP socket interface in C.
- ❑ Incorporated date range search capability to current vacation bookings search engine using ASP and VB script.
- ❑ Converted text files to XML using XSL, XSD, CSS for web data representation, formatting, and validation.
- ❑ Converted vacation booking confirmation fax and e-mail from text file to XML data file using Style Sheet and schema for formulation, representation and validation.
- ❑ Changed communication protocol between AAV and Worldspan travel from X.25 to TCP/IP.
- ❑ Oversaw the Worldspan/AAVacations application . Served as the chief IT personnel to ensure the proper daily operation and interaction between AAV (vendor) and Worldspan (operator) - a travel booking software package of multimillion dollars annual revenue.

- ❑ Migration of Open VMS applications from VAX to Alpha. (2003-2005)
- ❑ Converted the access to the AAV (American Airlines Vacations) database from reading VMS flat files to query Oracle tables using SQL and ProFortran. (1999-2002)