RESUME

INTRODUCTION:

Mark John Critoph
Owner, Sr. Programmer/Analyst
Huntley Software Systems
Kanata, Ontario, Canada
huntleysoftwaresystems.com
huntleysoftwaresystems@gmail.com
Enhanced and secret security clearances (not currently in effect)

Mark Critoph has worked as a computer application and systems programmer/analyst for the past 40 years and on a contract basis for over 35 years. Projects have spanned government, business, and scientific sectors and responsibilities have included:

- Software architecture, design, implementation, training and maintenance.
- Project specification and overall design.
- Team leadership and troubleshooting.
- Hardware/Software configuration
- Web database applications
- Real-time command and control for space and land based applications

Available for contract work only.

Computer Languages (general):
> C, Python, Visual Basic for Applications, Fortran IV, Pascal, APL, PL-1, Assembler (MASM for PC, DEC VAX, DEC PDP 11, Varian, IBM 360)

Computer Languages (Internet related):
> Python/Flask, Adobe/Macromedia/Allaire ColdFusion (9, 8,7,6.1,5.0,4.*,4.5 express,3.*,2.0,1.5), Flex (4, 3), JavaScript, HTML, Flash ActionScript (3.0,2.0, 1.0), Visual Basic (6.0, 5.0, 4.0, 3.0)

Webservers:
> Microsoft IIS, Netscape, Iplanet, Website

Databases:
> Sybase, MS Access Jet, MS SQL Server (2005, 2008, 2014), MS Desktop SQL, dBase, mySQL

Internet Protocols:
> WDDX/XML, TCP/IP sockets, IBM MQseries, Webservices

Hardware:
> Intel based computers(post Pentium),single board computers(Raspberry Pi 2, 3 and 4), PIV, PIII-1330, PIII-450, PII-233, P-60, 486, 386, PC-XT, DEC VAX, DEC PDP-11(03.23.24.34.40,44,60,70), PDP-8, HP1000, Apple IIe, Varian V72, Xerox Sigma-9, IBM 360/65

Operating Systems:

Huntley Software Systems
P.O.Box 11
Carp, ON K0A 1L0

613-839-5417
http://www.huntleysoftwaresystems.com
huntleysoftwaresystems@gmail.com

MS Windows (10, 8, 7, XP, 2000, 98, 95. 3.11), MS-DOS, Raspbian Linux, Red Hat Linux (RHEL 4, 9.0, 8.0,7.1), Ubuntu Linux, SUSE Linux, RSX11M, RSX11M-plus, RT11, VMS, CP-5, RTE II-IV, DOS, DesqView

Toolsets:

VMware (Server 2.0, Workstation 2-11), Macromedia Studio MX 2004, ColdFusion Studio, Homesite, Visual Basic(6.0,5.0,4.0), MS-Access(2016, 2010 ,2007, 2003, 2002, 2000 ,97 ,95 ,2 ,1.5), MS Office (2016,2010, 2010, 2007, 2003, XP, 2000), Norton Text Editor

In-house Systems:

MS Windows (10 pro, 7 pro, XP pro), MS Office (all versions from above), VMware Workstation (all versions from above), Adobe Flash Builder 4, Macromedia Studio MX 2004, IIS Webserver, ColdFusion MX 9, 8,7, 6.1, Flash Remote Server, Linux RH 8.0, Linux RHEL 4, Ubuntu, Python/Flask

The following PROFESSIONAL EXPERIENCE entries reflect the periods of major design and application development. Many of the projects have had enhancement contracts which are not indicated below. Time overlaps are due to the non-exclusiveness of contract relationships.

PROFESSIONAL EXPERIENCE (1990-current detailed)

Dec 2010
To Present

HUNTLEY SOFTWARE SYSTEMS (owner)
huntleysoftwaresystems.com

- Managed 5 domains one on internal IIS server
- Developed an in house Flex 4 productivity web app to enable testing different versions of ColdFusion from the same code source and commonly used URLs from different browsers.
- Implemented a VMware Server running on Win10pro that can run the following Guest Operating Systems (eight simultaneously)
  - Web/CF9 servers and FTP site machine that hosts huntleysoftwaresystems.com on the internet
  - MS-SQL server
  - General developer machine that has MS Office XP and Adobe/Macromedia MX tools
  - Flex 4 development machine
  - ColdFusion 7 and 9 development machines
  - MS Office 97, 2000, 2003, 2007, 2010, 2016 development machines
- Developed a Raspberry Pi controller written in Python that:
  - Controlled a dial-in modem for remote user command and system status
  - Monitored two temperature sensors (inside and outside)

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- o Turned on and off 3 devices (Pellet stove, Fan, Aux)
- Developed a Raspberry Pi controller written in Python that:
  - o Controlled a web interface for remote user command and system status
  - o Monitored two temperature sensors (inside and outside)
  - o Turned on and off 3 devices (Pellet stove, Fan, Aux)
- Designed and developed an internet based recipe website NoSaltAddedRecipes.com written in ColdFusion which features:
  - o A relational database of ingredients with nutritional values that are used to create recipes
  - o A web based recipe editor that uses ingredient in the database
  - o A web based recipe contributor management tool
  - o A monthly newsletter using MS-Publisher
  - o A web based monthly newsletter list management tool
  - o The website hosted on an internal IIS server

Fall 1986   **HUNTLEY SYSTEMS LTD**. (co-owner)
To Jan 2011 and **HUNYLEY SOFTWARE** (co-owner)
http://www.huntleysystems.com (inactive)

In-house development computer workstations, LAN, and internet
- Configured and maintained software development workstations.
- Hardware –PIV, PIII-1330, PIII-450, PII-233, P-60, 486, 386, PC-XT
- Operating Systems – Microsoft Windows (Win 7, VISTA, XP, 2000, 98SE, 95, 3.11), Red Hat Linux (RHEL 4, 9,8,7,5).
- Communications – internal network, dial-up modems, and DSL modem.
- Virtual Machine environment – VMware.
- Corporate Website and FTP site – IIS, ColdFusion MX 9, Flash Remoting.
- Evaluate new tools and determine the impact on the current workstation development suite.

Designed and implemented a fast menu prototyping and code generator. The prototyping tool allows a designer to come up with all the menus to be used by the end-user at an early stage in a project. No code needs to be initially written. Once the menus are accepted, a code generator generates all necessary software that duplicates the prototype menus. The software generated has the following features:
- Platform independent
- Multi-lingual (French, English ...)

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- Fully integrated debugging tools.

The package has been used for 15 years on a number projects. The generated "C" code can be compiled and executed on PC, DEC VAX, and Linux systems.

Fall 2010
To Fall 2012

COM DEV LTD. (contract)

PMI – Passive Mineralogy Instrument on a Mars rover through Neptec Design Group. Designed and implemented Ubuntu Linux single board computer on the rover that controlled a focus motor subsystem, spectrometer subsystem, and discreet I/O lines. Also designed and implemented a ground station computer GUI that controls and displays telemetry from the rover single board computer.

ENVIRONMENT: Linux Ubuntu, X Windows, GTK/Gnome/Glade GUI, GNU C

Feb 1997
To
July 2010

PWGSC – AMS(Government of Canada) (contract)
Internet applications for Contracts Canada
http://contractscanada.gc.ca

Provided various general services as:
- Application Architect
- Systems Analyst
- Senior Programmer/analyst
- Team Leader
- Internet Development Technical Advisor and Trainer
- Chief production support problem solver
- Development server and programmer workstation support
- CLF2 conversion team lead for four public facing internet applications

The Supplier Registration Information (SRI) system is a web-enabled application in which the supplier enters tombstone data about their company and indicates the commodities which they can supply. This data is then available to government buyers through a web-enabled search facility.
- Since its inception in fall 1997, has led all the design, development and maintenance cycles of SRI.
- Produced business cases for foundation software upgrades.
- Developed the WDDX/XML link for Government departments to obtain supplier tombstone contact information.

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- Developed the MQseries link to Revenue Canada to obtain a unique Procurement Business Number (PBN) for each newly registered supplier.
- Introduced Macromedia Flash Remoting for Applications to decrease request response time, reduce webserver rendering load, and standardize with a re-useable component architecture.
- Made SRI CLF2 compliant

The Contract Statistics on the Internet (CSI) system provides a query facility for the Internet audience to obtain information about contracts that have been awarded by government. This data is obtained from PWGSC and OGD (other government department) data warehouses and update by a nightly batch process.

- Since its inception in the winter 1997, has led all the design, development and maintenance cycles of CSI.
- Developed the general search engine that generates dynamic SQL queries from 24 optional fields and crosses 8 related tables to one of five selectable views.
- Made CLF2 compliant

ENVIRONMENT: ColdFusion (6.1,5.0,4.*, 3.*,2.0), Netscape Iplanet, Sybase, MS-Access, Macromedia Flash MX 2004 (remoting)

July 2008
To Fall 2010

ROUTES ASTRO-ENGINEERING INC. (contract)

Sapphire – designed and implemented a single-computer ground station support system for a Canadian instrument that will reside on an Com Dev satellite.

ENVIRONMENT: Linux RHEL 4, X Windows, GTK/Gnome GUI, GNU C

Apr 2006
To Spring 2010

ROUTES ASTRO-ENGINEERING INC. (contract)

UVIT – designed and implemented the multi-computer ground station support system for a Canadian instrument that will reside on an Indian satellite.

ENVIRONMENT: Linux RHEL 4, X Windows, GTK/Gnome GUI, GNU C

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Apr 2000 To Aug 2003	**ROUTES ASTRO-ENGINEERING INC.** (contract) Insect Habitat experiment system for the Canadian Space. The Insect Habitat will be used to study the development of insects under zero and one-G conditions, and will be housed on the International Space Station (ISS). http://www.routes.com

- Member of the overall IHAB software design team responsible for all ground station support equipment (GSE).
- Overall design of the GSE and initial science workstation prototype.
- Designed methods and procedures for building, delivering, maintaining operational tasks under Linux.
- Designed and developed C callable functions that support a NASA specified TCP/IP based socket to socket protocol.
- Designed and developed an application to application protocol between a GSE science workstation and IHAB.

ENVIRONMENT: Red Hat Linux (9,8,7.1), X Windows, GTK/Gnome GUI, GNU C

Fall 1999 To Winter 2000	**COMMUNICATIONS & INFORMATION TECHNOLOGY ONTARIO** (contract) http://www.cito.ca

An intranet over the internet distant office organization suite which connects offices in Kanata, Toronto, and London. Co-designer of the entire suite and assisted in the building of the CITO People module.

- CITO People - Intranet application for management of person contacts, with hierarchical list management, user definable data selection and download for local report and mailing list generation, administrator control over data updates.
- CITO Projects - Intranet application for management of CITO funded projects, with hierarchical list management, project information, and administrator control of user access to projects.
- CITO Organizations - Intranet application for management of organizations by CITO business development people, with hierarchical list management, organization information, contacts, and threaded notes.

ENVIRONMENT: ColdFusion 5, MS-Access 2000

Sep 1999	**TASKE TECHNOLOGY INC**. (contract)

Internet Customer Help desk tool

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- Web application that tracks Taske software customers problem reports.

ENVIRONMENT: ColdFusion 5, MS Access 2000

Sep 1997
To Sep 1998

ROUTES ASTRO-ENGINEERING INC. (contract)
Aquatic Research Facility (ARF) is a facility provided by the Canadian Space Agency's Life Sciences Program for three flights in support of the NASA Life Science Small Payloads Program. ARF's unique design allows 'zero-g' and simulated 'one-g' experimental control groups to be compared. The first flight was on the space shuttle in 1996. Routes recently completed upgrading the hardware and software for the ARF, in preparation for a second flight to examine the early development of copepods and zebra fish under microgravity conditions.

- Recovered the original "lost" source code from printed listing.
- Upgraded the embedded system software that was used to control the ARF facility environment.
- Developed an external command and control support computer that communicated with the ARF unit over a serial link.

ENVIRONMENT: Embedded Aztec C and assembler, Borland C

1995
(contract)

COMMUNICATIONS & INFORMATION TECHNOLOGY ONTARIO

Telecommunications Technology Alert

- Internet application that enables researchers to share information pertaining to projects and published papers.
- Researchers define specific areas of interest and are alerted by email when a qualifying article is submitted.

ENVIRONMENT: Visual Basic 4, ColdFusion 1.5, Website, MS-Access

1994
(contract)

OTTAWA CENTRE FOR RESEARCH AND INNOVATION

Contact Management (ForWord)

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- A general people/list management system to define a central person database with inclusion of these people on any number of hierarchical lists for categorization and mail merge (letters, mailing labels, catalogues / print, email, fax) with MS Word

ENVIRONMENT: MS Access 2

1991-1992   **HUNTLEY SYSTEMS LTD.** (In-house, sold locally)

MedAccount

- dBase application for Ontario Ministry of Health physician billing
- tracks single & multiple office physicians, patients, billings, generates MRI's, processes MRO's, patient & financial reports

ENVIRONMENT: DOS, C, CodeBase

1990-1991   **ROUTES ASTRO-ENGINEERING INC.** (contract)

Freja - Routes designed and built the electronics controller for two far ultraviolet imaging cameras which were flown on a Swedish spacecraft (Freja) launched in 1993 from China. The subsystem integration and mission support for the imager program were also provided by Routes

- Ground Station support application for an international satellite project to study the Aurora Borealis
- System used to control satellite imaging processes, displaying telemetry data and analysing/graphing image data.

ENVIRONMENT: C, DesqView, DOS

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PROFESSIONAL EXPERIENCE (1990-2004 listed) (contract)

Regional Municipality of Ottawa-Carleton – Water department
Knowledge Connection Corp.
Association of Canadian Community Colleges
Evert Communications

PROFESSIONAL EXPERIENCE (1972-1989 listed) (contract)

ROUTES INC.
Department of Public Works - Marine Engineering Div.
Canadian Astronautics Ltd.
Department of National Defence Navy, DMEM-2 - Y. R. Bellemare and Associates Inc.
K.O.M
IDON Ltd.
Communications Research Center - Department of Communications
Intellitech Canada Ltd.
Bell Canada
Laval University - Y. R. Bellemare and Associates Inc.

Employee History - Canada

January 1978 - May 1979   Canadian Astronautics Ltd.
March 1976 - December 1977   Bank of Canada
September 1975 - March 1976   Bell Northern Research

Employee History - USA

January 1972 - May 1975   University of Florida, Biochemistry Department
September 1969 - June 1971   E.I.duPont de Nemours Inc. (Co-op program)

EDUCATION

Carleton University, Ottawa, Ontario
September 1979 - December 1979
Computer science courses

University of Florida, Gainesville, Florida, U.S.A.
September 1969 - June 1971
Co-operative education program with E.I.dupont de Nemours
Systems engineering major
Computer sciences minor

University of Florida, Gainesville, Florida, U.S.A.
September 1967 - June 1969
Associate degree of arts degree in pre-engineering

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