**PAT HODGE (734) 844-0286**

**45466 Fountain View Drive**

**Canton, Michigan 48188**

**E-mail:** [Lhandph@comcast.net](mailto:Lhandph@comcast.net)

**OBJECTIVE** To utilize my education and experience in a software development position that will provide opportunities for personal and professional growth.

**EDUCATION EASTERN MICHIGAN UNIVERSITY** Ypsilanti, Michigan

**Secret Security Clearance: 10/31/16 (Inactive expires 6/22/19)**

**GM Certified DFSS Six Sigma Black Belt**

**Bachelor of Arts Degree : April 27 1991**

. Double Major : Math and Computer Science

. Languages : Microsoft Visual C++ 6.0 for Windows, Java 1.6 (6.0), LabVIEW 2016

Real Time Embedded programming with FPGA (LabVIEW CLAD

Certified), Assembly, Fortran, Lisp, C, Basic, Pascal, Forth, and Ladder

Logic

. Software : Tortoise SVN, JCreator Pro 4.0, Eclipse, LabVIEW 2016 with FPGA,

Lotus Notes, Allen Bradley 6200 (PLC 2/PLC 5), Icom (PLC

2/PLC5/SLC504), AutoCAD (2002), RS Logix (5 & 500), ODS (9

Series CNC), Square ‘D’ Symate Plus, Panelbuilder, Modicon & IDT

PanelMate, MS Word 6.0, Modsoft, Taylor (ProWorx Plus, NxT),

Windows (7), Excel 5.0, Office 2007, Mits. Electric GX Developer (PLC)

& GT Designer (GUI) QP configurators for Asi-Bus and servo drives.

. System : Omron Vision & 2D Matrix Reader, Symbol 2D Matrix Reader,

National Instruments PXI and cRIO real-time controllers.

. Programmable Logic Controllers: Modicon (484, 984, Quantum) GE Fanuc

9030, Allen Bradley PLC 2/PLC 5/SLC 504,

Indramat CLM, Square ‘D’ 9070, Mitsubishi

Electric Q series PLC (Q01, Q02, Q04, Q06)

. Graphical User Interface (GUI) : Java 1.6 Swing, Modicon and Eaton IDT

PanelMate Families, Allen Bradley PanelView

550/900/1200/1400e, Mitsubishi Q series GOT

. CNC : Allen Bradley 9 Series, GE Fanuc Series 15/16/18, Mitsubishi Electric QnA

series.

. Robotics : Fanuc Welding Robots - RJ Controller, ABB Material Handling

Robots, Adept.

. Training : LabVIEW 8.6 Real Time (RT), LabVIEW 8.6 FPGA (sbRIO, cRIO) ,

Pneumatics, GE Fanuc Series 16/18 (Maintenance), Square ‘D’ PLC

& Weld Controller, ABB Robotics (Maintenance & Programming),

Fanuc Welding Robotics (Programming), Allen Bradley 9 Series

CNC (Maintenance & Programming), 1 Day course Adept

Programming, 3 week course for Mitsubishi Electric Drives, CNC, PLC,

GOT (GUI), & Efector Asi-bus communication, Interviewing skills

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**EXPERIENCE**

June 13, 2016 - **DCS Corp.** Warren, Michigan

June 22, 2017 **Systems Integration Lab Engineer**

Delayed start date due to back log at DoD with background clearances for Interim Secret.

Original start date was scheduled for 4/11/16. Clearance expires 10/31/26.

R&D work utilizing LabVIEW 2016 Real-Time software for Windows OS at US Army TARDEC facility SEC developing software simulators for lab to be used for HIL testing of new tank software.

Apr. 11, 2011- **GM Milford** Milford. Michigan

Apr. 8, 2016 **Software Engineer**

Hired Direct by GM Jan. 6, 2014 (Start date after Christmas Shutdown)

Contracted by CompuCom – Oct. 24, 2011 – Dec. 20, 2013 (Programming Advisor)

Sub-Contracted by Robert Half to CompuCom Apr. 11, 2011 – Oct. 24, 2011 (Start

Date delayed) (LabVIEW Engineer)

Member of development team to upgrade 70 emissions test cells (CETS) globally to

LabVIEW PXI quad core real-time controller platform (PC-CETS) for data collection using AK protocol via Ethernet. This interfaced with Horiba and AVL equipment. Also

modified various signal test equipment (i.e. AC Monitor, DC Monitor) using LabVIEW

embedded prog. with FPGA (cRIO) and LabVIEW (2013 SP1). This test equipment

collects data at 20 Hz (50 ms) and is used for development and certification. Also

modified some Fortran programs to C++. Used SVN for software version control.

Nov. 29,2011 **LabVIEW CLAD Certification**

Nov. 10, 2008 – **HORIBA INSTRUMENTS, INC.**  Ann Arbor, Michigan

Dec. 22, 2010 (Contracted by Unique Systems Design Inc. Nov. 10, 2008 - May 18,2009, Direct 5/09)

**Analytical Software Engineer**

Member of development team for new product. Involved in GUI development in Java 1.6

and embedded software programming in LabVIEW 8.6 with FPGA for real time control,

(sbRIO). Other duties include PC Set-up and configuration for new systems and upgrades

Also troubleshooting support for service and QA departments.

Sept. 13, 2004 - **GLOBAL ENGINE MANUFACTURING ALLIANCE** Dundee, Michigan

Aug. 29,2007 **Technical Support Specialist – Controls Engineer**

Launch of new Engine Block Line in new Dundee plant.

**Block Line has OEE of 86% (AVG) and is the Chrysler bench mark for a**

**machining line. Dundee plant is Chrysler’s most successful plant launch**.

Position consists of interviewing prospective hourly employees, conducting line PDR’s

(Production Demonstration Run), Overseas travel for machine inspection & run-off,

Launch start of production (Sept. 05), troubleshooting machine failure, design & debug

logic and electrical modifications to reduce machine downtime & improve OEE

(Overall Equipment Efficiency), Revise electrical drawings using AutoCAD 2002. Also

responsible for approval of final documentation and archiving software back-ups in

MDT (MASS) and drawing back-ups in Windchill.

