# W. Craig Trader        Software Engineer / Technology Generalist

## Contact Information

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## Professional Overview

I am a technology generalist, but I am also highly skilled in all aspects of software system design, development, testing, and deployment. My forty years of software development includes:

◆ Thirty seven years developing web and client-server applications using Relational, Object-Relational, Graph, and NoSQL databases.

◆ Thirty years developing applications with Object-Oriented tools such as Python, Java, Groovy, .NET/C#, JavaScript, and C/C++.

◆ Nine years developing cyber-security applications for commercial and government customers.

## Technical Specialties

**Programming Languages and Technologies:** Python, Java, Groovy, JavaScript, JSON, Arduino, .NET (C#), C/C++, Shell Scripting.
**Relational and Object-Relational Databases:** PostgresQL, MongoDB, CosmosDB, OrientDB, MySQL, SQL Server, Oracle 10g / 11g.
**Operating Environments:** Linux systems (Red Hat, Ubuntu, Debian, Raspbian), AWS, Azure, Windows (10 / 7 / Mobile / Vista / 2003 / XP / 2000 / NT / 98 / 95 / 3.X).
**Cloud Platforms:** AWS (EC2, S3, IOT, Lambda, AuroraDB, Route 53), Azure.
**Virtualization Platforms:** Kubernetes, Docker, VirtualBox, VMware (ESX / ESXi / Server / Workstation).
**Agile and CM Tools:** Jenkins, Hudson, Git, GitHub, GitLab, BitBucket, Jira, Trac.

## Professional Experience

12/2022-present **Miovision (GTT), Remote**
**SENIOR DEVELOPER, SOFTWARE DEVELOPMENT**
Develop and maintain software for Intelligent Traffic Systems using Python, Visual C++, Node.js, JavaScript and AWS. Debug network communications using Wireshark. Manage software development using Jira, Confluence, Slack, and Google's G Suite applications.

07/2022-08/2022 **NextGen Healthcare, Remote**
**SENIOR STAFF ENGINEER**

03/2020-05/2022 **Capital Sciences, Herndon, VA**
**PRINCIPAL SOFTWARE ENGINEER**
Build tools for evaluating radio performance for UAV C2 systems. Build tools for simulating flights for testing airplane tracking systems. Integrate live data from GPS and IMS sensors, and ADS-B feeds. Design, develop and deploy applications using Python, Java, C#, Docker, and Azure. Managed development with Jira and Git.

09/2014-02/2020 **IDEFENSE SENIOR ENGINEER, Reston, VA / Rosslyn, VA**
*Accenture Security (2017-2020)*
*Verisign Security Services (2014-2017)*
DevOps Engineer for iDefense. Design, Document and manage object schema for graph database in support of the new IntelGraph application. Develop web applications using Java, Groovy, Spring Boot, and OrientDB. Deploy applications with Open Stack, AWS, Docker, Ansible, Terraform, Gradle, and Ant. Maintain legacy applications written in Java. Manage development using Team City, Jenkins, Git / GitHub / Bitbucket, and JIRA. Mentor junior developers.
(Accenture Security acquired the iDefense group from Verisign in May, 2017)

11/2012-09/2014 **Sterling Computers, Chantilly, VA for Northrup Grumman**
**SENIOR SOFTWARE ENGINEER**
Develop and Test workflow applications for document exploitation using JBOSS, JBPM, and OpenAMQ on Linux. Develop and Deploy graph databases using Objectivity, C++, and Java on Linux and WIndows Server 2008. Managed development with Subversion, Jenkins, Ant, Bugzilla and JIRA.

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**06/2011-11/2012** **Novel Applications of Vital Information, McLean, VA for General Dynamics-AIS**
**SENIOR SOFTWARE ENGINEER**
Developed and deployed distributed applications for Malware Analysis using Python (Django), Java (JSF), PHP, MySQL, Cisco IOS, TomCat, Apache, Red Hat Linux. Built a virtualization environment for software development, testing, and deployment. Managed development with Git and JIRA.

**07/2010-05/2011** **Harris Crucial Security, Chantilly, VA**
**SENIOR SOFTWARE ENGINEER**
Develop and deploy distributed applications using Python, Django, Oracle, VMware ESX, Red Hat Linux. Built a virtualization environment for software development, testing, and deployment. Managed development with Trac and Subversion.

**05/2009-05/2010** **Mercury Federal Systems, Reston, VA**
**SENIOR STAFF ENGINEER**
Developed Linux device drivers, ported Software-Defined Radio software, and built testing frameworks in support of OpenCPI, an Open Source Component Portability Infrastructure, using Red Hat Linux, C, C++, and CORBA. Managed development with Trac, Git, Subversion.

**10/2006-05/2009** **Sphere of Influence, Vienna, VA**
**SENIOR INFRASTRUCTURE ARCHITECT / SENIOR SOFTWARE ENGINEER**
Provided technical expertise when developing software systems for government and commercial customers. Built a virtualization environment for software development, testing, and deployment.
**2008-2009 Gator Snap**
Developed software for a multimedia Windows Mobile application, using C#, C++, and Windows DirectShow.
**2007-2009 SMS**
Provided software development and engineering support to SMS, using Microsoft .NET, C#, and SQL Server 2000. Developed a continuous integration environment for building and testing this system.
**2006-2007 ABACUS Field Accounting**
Developed software for a distributed accounting system deployed to offices around the world, using Microsoft .NET, C#, SQL Server 2000, and MSMQ middleware. Specific challenges for this project included supporting the broad range of fielded system configurations as well as limited resources.

**07/2006-present** **Akonizo, Sterling, VA**
**WEB TECHNOLOGY CONSULTANT**
Develop and deploy websites for artists and amateur entertainment groups using Wordpress, PHP, Python, MySQL, AWS, and VMware.

**11/2001-10/2006** **Lockheed Martin IS&GS, Gaithersburg, MD**
**08/2006 – 10/2006, JTRS AMF Proposal, INFRASTRUCTURE ARCHITECT**
Designed a development and testing infrastructure for cross-team integration.
**10/2004 – 06/2006, MISSILE DEFENSE NATIONAL TEAM, ABM IPT, LEAD TOOLS ENGINEER**
Responsible for developing processes, tools, and techniques for applying Model-Driven Architectures, Test Oracles, and Agile Development Processes for the development of the Advanced Battle Manager for the Missile Defense National Team (B). Responsible for deploying a distributed, integrated development environment for 100 developers.
**11/2003 – 09/2004, CTL ACTD, SOFTWARE ENGINEER**
Developed user interfaces with Model-Driven Architecture for interfacing with web services for Coalition Theatre Logistics Advanced Concepts Technology Demonstration.
**07/2003 – 10/2003, ARCI, SOFTWARE ARCHITECT**
Researched, tested, and recommended appropriate technologies for inclusion into future generations of the Advanced Rapid COTS Insertion sonar systems. Investigated clustered file systems that would meet the mission-critical requirements of modern sonar systems.
**11/2001 – 06/2003, JTL ACTD, LEAD INTEGRATION ENGINEER**
Integrated software from five co-contractors with Lockheed developed software for the Joint Theatre Logistics Advanced Concepts Technology Demonstration, including configuration management, testing, and scheduling integration experiments. Lead a team of cross-functional engineers in support of the integration effort. Developed and integrated distributed software systems using Java and CORBA to collaborate on Operations and Logistics information.

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## Professional Experience (continued)

**11/2000-05/2001** **ScoreBoard, Inc., Herndon, VA**
**OpenNMS FELLOW / SOFTWARE ARCHITECT**
Developed agent extensions to OpenNMS, an Open Source Network Management Software package. Re-engineered corporate extranet using Java Server Pages for stability and manageability. Provided technical leadership and direction for programmers and engineers.

**07/1999-11/2000** **Vitel, Inc., Chantilly, VA**
**SOFTWARE ARCHITECT**
Responsible for architecture, design, and delivery of software systems for Real Time SCADA (Systems Control And Data Acquisition) applications using Java, C++, and CORBA, deployable under Linux and Windows.

**05/1997-07/1999** **MITRE Corporation, Reston, VA**
**SENIOR NETWORKING AND DISTRIBUTED SYSTEMS ENGINEER**
Analyzed and made recommendations about emerging technologies (Linux, CORBA, DCOM, XML, Java, Internet Protocols, Database Federation, Mobile Code) as applied to government and defense needs.

**03/1996-04/1997** **Kaizen Works, Reston, VA**
**SENIOR SOFTWARE ENGINEER / WEB DATABASE SPECIALIST**
Specified, designed and implemented Object-Oriented, web-based multimedia databases. Designed and implemented Python class libraries and extensions for database access and web site integration. Provided technical leadership and direction for programmers and engineers.

**03/1992-02/1996** **Datatel, Inc., Fairfax, VA**
**ANALYST-PROGRAMMER / TOOLS & TECHNOLOGY SPECIALIST**
Specified, designed, and implemented improvements to Envision, a platform independent CASE tool. Specified, designed, and implemented improvements to existing language translators (Basic to Data/C++) as well as new language translators (custom function translators). Specified, designed, and implemented data-porting tools to transition over two hundred customers from Information databases under Primos to Unidata under UNIX and VMS. Configuration manager for release 12 of Colleague, Datatel's premiere College Administration software. Integrated and tested 3rd party middleware for client/server database access and reporting.

**08/1991-02/1992** **Ultimate Data Systems. Inc., Wilton, CT**
**SYSTEMS ANALYST**
Redesigned and implemented Accounts Receivable, Physical Inventory subsystems. Established programming standards for all new development.

**03/1988-07/1991** **Pegasus Publishing Systems (PPS), Inc., East Brunswick, NJ**
**05/1990 – 07 / 1991, SYSTEMS ANALYST / PROJECT LEADER**
Designed and implemented a completely new system for managing the publishing of books and journals. Directed programmer/analysts and junior programmers.
**03/1988 – 05/1990, ANALYST / PROGRAMMER**
Designed and implemented several custom database systems, as well as specifying others for contract work. Maintained existing software and designed, wrote and installed major modifications to sub-systems. Specified and implemented data conversions. Managed two junior programmers and an outside contractor. Managed customer support for 10 customer sites.

**03/1984-10/1988** **United States Air Force**
**COMPUTER OPERATOR / SERGEANT**

## Volunteering

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| 2011-present | FIRST Robotics (Scorekeeper, Judge). |
| 2012-2022 | Nova Labs (Full Member). |

## Education

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| 2002-2003 | University of Phoenix, Pursued a BS in Information Technology. |
| 1984-1988 | United States Air Force, Military and Management Training courses, Computer Programmer Career Development Course, Computer Operator Career Development Course |
| 1981-1983 | S.U.N.Y. College at Brockport, Brockport, NY, Majored in Computer Science and Mathematics |
| 1977-1981 | Watkins Glen High School, Watkins Glen, NY, Graduated with Regents Diploma |