# David Wallace Croft

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[www.CroftSoft.com/people/david](https://www.CroftSoft.com/people/david)

[david@CroftSoft.com](mailto:david@CroftSoft.com)

## Objective

* Principal Rust Developer

## Summary

* Veteran Software Developer with a current focus on cloud-hosted web applications
* Certifications: [AWS Certified Developer – Associate](https://www.credly.com/badges/e82122fb-8b5e-47ec-a996-ff2eb0024aa4/public_url) and [CompTIA Security+](https://www.credly.com/badges/43afeabf-bbbc-474f-940c-9fd2158a15e0/public_url)
* Proficient in AWS, Java, TypeScript, and Angular with growth in Rust and Dioxus
* Rust and Wasm research: [www.CroftSoft.com/people/david/research/rust-wasm/](https://www.CroftSoft.com/people/david/research/rust-wasm/)
* Experience as author, inventor, lecturer, proposal writer, and user group leader
* Past clients: Air Force, Army, CMS, DCSA, FINRA, FRB, IRS, NASA, NIJ, NIST

## Education

* 2003 May – 2005 May: M.Sc. Applied Cognition and Neuroscience  
  University of Texas at Dallas (UTD), Richardson, Texas  
  Research focus: Neuroprosthetics simulation in Java
* 1993 Oct – 1995 Jun: M.Sc. Electrical Engineering  
  California Institute of Technology (Caltech), Pasadena, California  
  Research focus: Computational Neuroscience, Neuromorphic VLSI
* 1986 Jul – 1990 Jun: B.Sc. Electrical Engineering  
  United States Air Force Academy (USAFA), Colorado Springs, Colorado  
  Course focus: Computer Engineering, Digital Electronics, Neural Networks

## Skills

* AI: Artificial Neural Networks, Business Rule Engine, Intelligent Software Agents
* Angular: Electron, Firebase, Ionic, Material, NgRx, Scully, Visual Studio Code
* AWS: Amplify, API Gateway, AppSync, Cognito, EC2, Lambda, Route 53, S3, SES, SNS
* Database: Aurora, DynamoDB, JDBC, JPA, MongoDB, Oracle, PostgreSQL, RDS, SQL
* DevOps: CFn, CI/CD, CodePipeline, Docker, Git, Governance, IaC, IAM, Jira, Scrum
* Graphics: COLLADA, Java 2D, Java 3D, Java OpenGL (JOGL), SVG, Xith3D
* JavaScript: AG Grid, AJAX, jQuery, Node.js, React, Redux, RxJS, TypeScript
* Middleware: Apache, JBoss BPMS/BRMS/Drools/EAP/OpsNet, OpenShift, Tomcat
* Rust: Bevy, Cargo Lambda, Dioxus, Fermyon Spin, RustRover, serde-json, wasm-pack
* Simulation: Computational Neuroscience, Logistics, Spiking Neuronal Networks
* Test: Cypress, HtmlUnit, Jasmine, JMeter, JUnit, Mockito, Protractor, Selenium
* Web: CSS, HTML5, JWT/OAuth2/OIDC, PWA, WCAG, Web Components, WebAssembly
* Web Services (WS): GraphQL, JAXB, JAXP, REST, SOAP, StAX, XML, XSD, XSLT

## Experience

* 2024 Feb – Present  
  Software Development, Senior Advisor / Peraton, Dallas, TX (2024 Aug)  
  Senior Java (AWS) Developer / Prime Technical Services, Dallas, TX (2024 Feb)
* Angular, AWS, Java, PySpark, and React software development and maintenance
* AWS Glue, AWS SDK for Java, DynamoDB, Log4j, Mockito, Redux, Spring Boot
* 2021 Oct – 2023 Oct  
  Principal Angular Developer  
  Innova Solutions, Dallas, TX
* Financial Industry Regulatory Authority (FINRA) web application development
* Angular, AWS, Git, Jasmine, Java, JUnit, Mockito, NgRx, RxJS, Spring, TypeScript
* 2018 Aug – 2021 Oct  
  Senior Full Stack Developer  
  EXB Solutions, Dallas, TX
* Developed cloud-based web applications supporting NASA space communications
* Converted a Java-based application to Angular and AWS Cloud and provided updates
* Created wiki pages detailing step-by-step solutions for development and maintenance
* Wrote application design documentation emphasizing AWS cloud serverless solutions
* Promoted adoption of the Agile Scrum Framework and DevOps development practices
* Authored innovative technology proposals in response to federal solicitations
* AWS: Amplify, API Gateway, AppSync, Cognito, DynamoDB, Lambda, RDS, S3
* DevOps: CloudFormation, CodeBuild, CodeCommit, CodePipeline, Docker, IAM, Jira
* Web: Angular, CSS, Cypress, Electron, GraphQL, HTML, NgRx, Node.js, TypeScript
* 2015 Mar – 2018 Aug  
  Senior Java Developer  
  EXB Solutions, Dallas, TX
* Development and support of high-traffic public-facing IRS web applications
* Angular, Bootstrap, Java, JavaScript, JBoss, jQuery, JSF, Spring MVC, Struts, ThymeLeaf
* 2012 Jul – 2015 Mar  
  Senior Consultant  
  Red Hat, Dallas, TX
* Java-based middleware consulting for multiple government and industry clients
* Apache, JBoss BPMS/BRMS/Drools/EAP/EWS/OpsNet, Linux, OpenShift, Tomcat
* 2007 Aug – 2010 Feb  
  Senior Systems Programmer / Analyst  
  Collins Consulting / Cole Engineering / Signature Consultants, Garland, TX
* U.S. Army Future Combat Systems Logistics Data Management Service Team IBM
* Applet, Drools, EJB3, Hibernate, JAX-WS, JBoss, JDBC, JPA, JSP, MDB, Oracle, Portlet
* 2007 Jan – 2007 Aug  
  Research Engineer  
  SET Corporation, Arlington, VA
* Unmanned Aerial Vehicle (UAV) Advanced Ground Control Station
* 3D OpenGL graphics, GUI, video, and peer network programming
* 2004 May – 2006 Oct  
  Software Developer  
  Whoola Inc., Richardson, TX
* Peer-to-Peer Virtual Reality Learning Environments research grant
* Lead Developer and primary author of research status reports
* Wrote a 3D web browser and early COLLADA loader for Java
* 2003 Jan – 2003 Dec  
  Lecturer I  
  University of Texas at Dallas, Richardson, TX
* Taught Java game programming in the Spring and Fall
* Authored course content and the book “Advanced Java Game Programming”
* 1999 Jul – 2000 Dec  
  Senior Software Architect (2000) / Senior Software Engineer (1999)  
  Isadra, Inc. and Vertical Net Inc., Palo Alto, CA
* Refactored prototype business-to-business (B2B) distributed e-commerce hub
* Active in e-commerce XML standards organizations ebXML and BPMI
* 1997 May – 1999 Jun  
  Senior Intelligent Systems Engineer / Technical Lead  
  Analytic Services Inc. (ANSER), Fairmont, WV
* Design and development of Internet software agents and bots
* Training, coordination, and tasking of Java subcontractors
* 1995 Jun – 1996 Jul  
  Systems Engineer  
  Tanner Research Inc., Pasadena, CA
* Developed software for U.S. Air Force SBIR Neural Network Silicon Compiler project
* Design of CMOS VLSI Digital Neural Network Architecture circuitry and layout
* Lab testing of analog/digital VLSI for speech recognition and neural networks
* 1990 Jun – 1993 Oct  
  Computer Systems Engineer / First Lieutenant  
  Data Management, B-2 CTF, 31st TES, U.S. Air Force, Edwards AFB, CA
* Developed data analysis and database software in the Ada and Clipper languages
* VMS / Ultrix (DEC Unix) Systems Manager and Novell Working Group Manager