

David Wallace Croft

2025-04-04

www.CroftSoft.com/people/david
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 and CompTIA Security+
- 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/
- 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