



UEI: TEZCS4UTLKB5 | CAGE CODE: 13DM9

CAPABILITY STATEMENT

codecypher LLC is an SBA HUBZone certified small business providing high quality, state-of-the-art software engineering services. Founded in 2023 and located in Knoxville, Tennessee, we focus on providing AI engineering, software engineering, and R&D services. We have the expertise needed to complete almost any software or hardware project.

CORE COMPETENCIES

Artificial Intelligence Engineering

codecypher offers *The AI Process* for solving real-world problems and the expertise needed to design, implement, deploy, and monitor state-of-the-art AI solutions.

- Generative AI (GenAI)
- Deep Learning
- Natural Language Processing (NLP)
- Computer Vision (CV)
- Business Intelligence and Big Data
- Distributed data analytics and processing
- High Performance Computing (HPC)
- MLOps, Containers and Orchestration, Virtual Machines (VMs)
- Autonomous Vehicles (AV) and Unmanned Aerial Vehicles (UAV)
- Data Analysis, Modeling, Management, and Migration

Software Development and Engineering

codecypher applies an agile methodology and advanced programming skills in developing versatile solutions across various programming languages, software tools, libraries, and frameworks for a variety of software and/or hardware solutions.

We have the skills and expertise needed to support our customers' missions and streamline operations by creating new applications or modernizing legacy applications using the latest technology.

- Custom Software Development
- Database and Applications Development
- Web Application Development
- DevOps, CI/CD
- Cloud, Microservices, and Distributed Applications Development
- Data Warehouse Solutions
- Mobile Applications
- Portal and Dashboard Solutions
- Automated Workflow Solutions

DIFFERENTIATORS

- 25+ years of software engineering experience
- Staff has excellent academic and industry credentials
- The *AI Process* for success in solving real-world problems

PRIMARY NAICS CODES

541511: Custom Computer Programming Services

541512: Computer Systems Design Services

541715 Research and Development in the Physical, Engineering, and Life Sciences

POINT OF CONTACT

Jeffrey Holmes
Founder & Principal Engineer
Phone: (865) 213-1989
Email: jeff@codecypher.ai
Website: codecypher.ai

Jeffrey Holmes has an MS in Applied Mathematics, MSCS in Artificial Intelligence, IEEE Senior Member, numerous industry certifications, and many technical articles published.



PAST PERFORMANCE

Advanced Catalyst Systems

Data Acquisition System

Designed data acquisition and log file processing Desktop application for Advanced Catalyst Systems LLC software to automate labor-intensive processes which is expected to save the company \$45K per year in labor costs alone.

Social Security Administration (SSA)

ALJ Case Management System

Successfully migrated legacy application from DOS to Visual Basic and DB2 saving a \$4.5M software project from failure by reducing development time from 2 years to 2 weeks.

DHQRS Case Review System

Successfully refactored Visual Basic and SQL Server application reducing software errors by 99% and saving the agency over \$300K.

Warehouse Inventory System

Successfully migrated failing critical warehouse purchasing system from ColdFusion to ASP.NET increasing system performance by 95% and saving the agency more than \$150K.