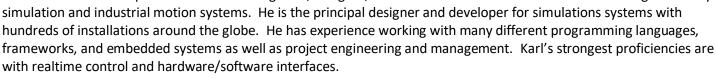# Karl Hendricks

Software Engineering

Date: 18 Aug 2022
Revision: 2

Summary of Qualifications

Karl Hendricks is an experienced software engineer, designer, and technical lead with over a decade working in military simulation and industrial motion systems. He is the principal designer and developer for simulations systems with hundreds of installations around the globe. He has experience working with many different programming languages, frameworks, and embedded systems as well as project engineering and management. Karl's strongest proficiencies are with realtime control and hardware/software interfaces.

Skills and Proficiencies

<u>Programming Languages:</u> C++, C#, Java, Python, SQL

<u>Frameworks and Platforms:</u> Unity, .NET, Boost C++, Django, Red Hat Linux (realtime)

Work Experience

Software Engineering Manager
ACME Worldwide Enterprises, Inc. 2013-2020 (Military Simulation, Motion)

- Returned to ACME as software manager, led design and implementation of all software projects
- Designed realtime monitoring and control software for hardware motion systems
- Designed a full gunnery training system, in use by USAF, using Unity and force-feedback gun replicas
- Provided on-site domestic and international technical support for delivered products
- Created extensive documentation for quality control and testing of integrated hardware/software systems

Software Engineer
Analytical Solutions, Inc. 2011-2013 (Destructive Physical Analysis)

- Worked on a software analysis tool for the reverse engineering of microchips
- Experience with computer vision, image processing, spatial databases, and TB-scale datasets
- Created various internal tools used to control and monitor destructive physical analysis equipment

Software Engineer
ACME Worldwide Enterprises, Inc. 2008-2011 (Military Simulation, Motion)

- Implemented low-level hardware interface code for an aerial refueling simulation trainer
- Designed an internal web-based procurement management tool and database backend
- Worked with numerous embedded Linux systems and motion controllers
- Designed motion control loops, motion tuning, and motion safety systems

Education

- Bachelor of Science, Computer Science