Kevin M. Garner

League City, TX kevin.m.garner@gmail.com

github.com/KevDev13 linkedin.com/in/kevinmgarner

I am a spaceflight software and operations engineer with 10 years experience. I am currently pursuing my MS in computer science part-time, online at Georgia Tech, where I am focusing on low-level computing systems. I have strong knowledge in C and C++, and have also used Rust and Python previously.

SKILLS

Tools and Languages C, C++, Rust, Python, Linux, Git, ŁTĘX

Knowledge Areas Operating systems, Parallel systems, Cryptography, Avionics

TECHNICAL EXPERIENCE

Senior On-orbit Operations Engineer

Apr 2021 — Present

Houston, TX

· Lead planning and execution of spaceflight payload operations

- Developed and executed test plans for software and hardware integration
- · Planned new operations for Nanoracks Outpost program, utilizing spent upper-stage rockets for payload operations

Avionic Subsystem Manager

Mar 2020 — Apr 2021

MRI Technologies

Nanoracks, LLC

Houston, TX

- Lead team in embedded system software updates, including requirements development, verification testing, and code reviews
 for bare-metal C code
- Planned and executed troubleshooting and failure resolution of spaceflight avionic hardware and software

Operations EngineerJun 2012 — Mar 2020Cimarron, IncHouston, TX

- Lead multi-departmental team in creation of International Space Station flight software scripts, following NASA flight software development process for scripts that included fault detection algorithms and automated procedures
- Certified as an International Space Station flight controller, worked in NASA mission control. Monitored and operated International Space Station (ISS) avionics, communication, command, and data handling systems.

EDUCATION

M.S. Computer Science, Georgia Institute of Technology

exp. Dec 2023

Relevant coursework: Introduction to Operating Systems, Advanced Operating Systems

B.S. Electrical Engineering, Louisiana State University

May 2011

Relevant coursework: Data Structures and Algorithms, Computer Architecture

PROJECTS

MapReduce in C++ with gRPC

Length extension attack on SHA-1 in Python

Simple, multi-threaded distributed file system in C++ with gRPC

Shamir's Secret Sharing scheme in Rust

AWARDS

Integrated Mission Operations Contract Excellence Award	2019
NASA Flight Operations Directorate (FOD) Director's Award	2015
NASA Spaceflight Awareness Team Award	2014