

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

# Kevin M. Garner

## Software Developer

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

I am an experienced software and spaceflight operations engineer with over 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 and computer security. I have strong knowledge in C and C++, and have also used Rust and Python previously.

### SKILLS

<b>Tools and Languages</b>	C, C++, Rust, Python, Linux, Git, $\text{\LaTeX}$
<b>Knowledge Areas</b>	Cryptography, Operating systems, Parallel systems, Avionics

### TECHNICAL EXPERIENCE

<b>Senior On-orbit Operations Engineer</b> <i>Nanoracks, LLC</i>	<b>Apr 2002 — Present</b> <i>Houston, TX</i>
---	---

- 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

<b>Avionic Subsystem Manager</b> <i>MRI Technologies</i>	<b>Mar 2020 — Apr 2021</b> <i>Houston, TX</i>
---	--

- 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

<b>Operations Engineer</b> <i>Cimarron, Inc</i>	<b>Jun 2012 — Mar 2020</b> <i>Houston, TX</i>
--	--

- 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

<b>M.S. Computer Science</b> , <i>Georgia Institute of Technology</i>	exp. Dec 2023
<b>B.S. Electrical Engineering</b> , <i>Louisiana state University</i>	May 2011

### 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