

Jef Hinton

DevOps Advocate & Space Geek

Experience

Staff Data Engineer- Advanced Analytics Tech Lead

Lockheed Martin, Remote, US (Nov 2023- Present)

Champion software stability & developing a resilient cloud based data pipeline- Python, AWS (EC2, S3, Lambda)

Support formal and informal mentoring of junior engineers & create custom development plans.

Organize project roadmap & remove blockers for development team

Overhaul code review processes, deployment strategies & bug management plans

Utilize text extract and OCR to make data available to our users and partners.

Create project culture that the team is excited to be a part of.

Senior Data Engineer- Advanced Analytics

Lockheed Martin, Remote, US (Dec 2021- Nov 2023)

Data infrastructure & Machine Learning / AI Dev- Python, AWS (EC2, S3, CloudWatch)

Collaborate with cross functional teams to brainstorm win/win solutions.

Leveraging AI/ML to cook up precedence and bottleneck detection for the latest F-35 recipe.

Refactor data pipelines to leverage parallelization and distributed computing capabilities.

Senior Software Engineer.- Deep Space Exploration

Lockheed Martin Littleton, Colorado (Apr 2020- Dec 2021)

Ground Data System Development- C++ Bash, Java, Python, Docker, Linux

Prime GDS engineer for Lucy spacecraft launch team-> Liftoff 10/16/21

Reviewed spacecraft data & performed anomaly resolution inside and outside the clean room.

Spearheaded new feature development and held down the fort as an interim scrum master.

Software Engineer- Embedded Flight Software

Lockheed Martin Littleton, Colorado (Aug 2016- Apr 2020)

DevOps experience with creating Infrastructure as Code (IaC)

Built continuous improvement pipelines (CI/CD) gitlab runners & docker containers.

Refactored flight code to remove obsolete design patterns. Death to singletons!

Developed Flight Software tools in Python, Java, C++ and Perl

Learned pytest to deliver unit test and functional test verification processes

Maintained mountains of documentation

Data Analyst- Robotics Reporting

John Deere Cedar Falls , Iowa (Aug 2013- Nov 2015)

Create Tableau dashboards to display data collected from machining robots

Implement web displays for real time information for each automation cell

Designed & Implemented VBA macros to automate tasks which resulted in time savings of 913 hours per year.

Datacleaning experience, utilized exports from SAP to create recurring metrics & exploratory business insights.

Resident Assistant & Senior Resident Assistant

University of Northern Iowa Cedar Falls, Iowa (Aug 2013– May 2016)

Responsible for development and training of 15 team members

Facilitated activities amongst 54 students and created house leaders

Participated in interview processing and selected new Resident

Assistants

Education

Colorado School of Mines Golden, CO (Jan 2019– Present)

Masters of Science– Space Resources

Relevant Coursework: Space Systems Engineering, Advanced Planetary Geology, Design of Experiments

Performed budget analysis & system design for human spaceflight to Mars

University of Northern Iowa Cedar Falls, Iowa (Aug 2012– May 2016)

Bachelors of Arts in Management Information Systems

Undergraduate research in Electro-Magnetic Pulses on university campuses

Courses taken in SQL, PHP, Tableau, R, HTML, CSS and Network Security.

Experience with UNIX/Linux, Solaris, Python, C++, Java, RESTFUL APIs, Service Oriented Architecture.

Research

NASA Big Idea Challenge: Hardware Test Engineer

Demonstrated proof of concept of cordless Lunar power beaming.

Composed simulations and animations in Blender

Wrote small-sat test plan & executed in Lunar regolith test bed.

Publications:

1. A framework for Lunar Resource Extraction Site Investigations
2. Lunar Autonomous Scalable Emitter and Receiver (LASER) system