

# Kyle Siegel

EXPERIENCED ANALYST · DATA SCIENTIST · MANAGER

38596 U.S. 6, E301, Avon, CO 81620 · Willing to relocate

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*Data analyst and manager with experience at SpaceX as a dynamics analyst, and the YMCA as a Program Director. Graduate of Harvey Mudd College with distinction. Looking to solve problems that have a significant impact on the ski industry.*

## Education

### Harvey Mudd College

B.S. IN ENGINEERING, GPA:3.62

Claremont, CA

Fall 2010 - Spring 2014

- Dean's List: Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2014, Spring 2014.
- Tau Beta Pi Engineering Honor Society- Awarded to top 20% of engineers.

## Engineering Experience

### Satcom Resources

SOFTWARE ENGINEER

Avon, CO

June 2016 - Present

- Improving the speed and reliability of orders through software automation.

### SpaceX

DYNAMICS ENGINEER

Hawthorne, CA

April 2015 - December 2015

- Determined a purpose, vision, and roadmap to overhaul the internal software tools for the Dynamics group, and implemented the tools while continuously soliciting feedback and building in new features.
- Doubled the reliability and halved the time of test specification creation by designing and implementing a data analysis and data visualization software package.
- Decreased review time of technical documents by deploying a web application that allowed engineering to create a sharable and easily accessible and followable document.
- Ensured all vibration susceptible components were safe for Flight 21 (the first rocket to land successfully) by writing Python scripts that queried thousands of vibration tests and checked against new testing standards.
- Mitigated component susceptibility to high frequency dynamics by working with designers, predicting vibration and shock environments through data aggregation of test and flight data, and implementing vibration tests to qualify hardware before flight.

### SpaceX

DYNAMICS INTERN

Hawthorne, CA

May 2013 - November 2013

- Determined shock and vibration environments for propulsion, avionics, and structural components on the Falcon 9 rocket and Dragon capsule. Followed by assisting with the testing and verification of these component environments.
- Improved accuracy of shock environments by implementing and analyzing several large scale shock tests to determine shock susceptibility of components.
- Improved speed and reliability of data reviews by developing automated reports in Matlab.

### eSolar Inc.

MEMBER OF 6 PERSON TEAM

Burbank, CA

Fall 2013 - Summer 2014

- Designed, built, and tested a data acquisition and instrumentation package to measure wind loads on heliostats.
- Wrote end-to-end code to process force data on heliostats that streamed live data from a sensor network into a database, synced timing from multiple data sources, processed data to extract noise and presented the data in useful and interactive visualizations.

### Skyline Eco-Adventures

MEMBER OF 5 PERSON TEAM

Claremont, CA

Fall 2014 - Winter 2014

- Developed prototype of adjustable braking trolley to control velocity of zipline participants.
- Wrote trolley simulation code in Matlab that allowed the team to effectively evaluate design alternatives.

## Leadership Experience

### McGaw YMCA

PROGRAM DIRECTOR

Fremont, MI

February 2014 - October 2014

- Supervised and evaluated 60 staff members per session and fostered appropriate behavior and growth of 200 campers per session, smoothly and safely for 6 sessions with camper, parent, and staff satisfaction above 90%.
- Trained and developed about 100 staff members through summer long training and development programs.
- Made actionable changes based off of bi-weekly customer surveys and analytics.
- Achieved highest return rate for campers the following summer in history of the camp, indicating all time high satisfaction.
- Organized staff and camper cabin assignments, weekly staff time off and activity assignments, weekly camper activity signups, onsite camping for every cabin, and weekly special programs.

### Vail Resorts

SKI INSTRUCTOR

Vail, CO

Winter 2014, Winter 2015

- Achieved PSIA Level 1, 2, and most of 3. In top 20 instructors to attend training.

## Skills

**Programming** Python(w/ Pandas, NumPy, scikit-learn, Jupyter/IPython), C++, Matlab, Git, SQL, JavaScript, HTML, CSS, PHP, LabView.

**Certifications** PSIA Alpine Level 2, PSIA Childrens Specialist 1, NOLS Graduate, PADI Open Water.