

Kyle Siegel

EXPERIENCED ANALYST · DATA SCIENTIST

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

☎ (847) 420-2341 | ✉ kyle.siegel1@gmail.com | 📱 kyle-siegel | 🌐 www.linkedin.com/in/kyle-siegel-549b9114

Education

Harvey Mudd College

B.S. IN ENGINEERING, GPA:3.62

- 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.

Claremont, CA

Fall 2010 - Spring 2014

Skills

Programming Python, C++, Matlab, R, JavaScript, HTML, CSS, LabView, System Verilog,

Certifications PSIA Level 3, NOLS Graduate

Engineering Experience

Satcom Resources

SOFTWARE ENGINEER

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

Avon, CO

June 2016 - Present

SpaceX

DYNAMICS ENGINEER

- Doubled the reliability and halved the time of test specification creation by designing and implementing a data analysis and data visualization software package using mainly Python, Pandas and Numpy. This allowed engineers to work with large data sets more efficiently leading to more accurate test specifications.
- Deployed Python package to local Pip accessible repository with continuous deployment, automatic testing, and automatic documentation generation using Bamboo, PyLint, Tox, and Sphinx.
- Deployed a Jupyter Notebook application to AWS GovCloud for Dynamicists to use the Python package's data structure, math utilities, data aggregation tools, and data visualization sub-package in a sharable and easily accessible document.
- Decreased flight risk by writing Python scripts that queried thousands of vibration tests and checked against new testing standards for Flight 21(the rocket that landed) ensuring all vibration susceptible components were safe for flight.
- 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.

Hawthorne, CA

April 2015 - December 2015

SpaceX

DYNAMICS INTERN

- 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.

Hawthorne, CA

May 2013 - November 2013

eSolar Inc.

MEMBER OF 6 PERSON TEAM

- Designed, built, and tested a data acquisition and instrumentation package to measure wind loads on heliostats.
- Wrote data processing code to get force data on heliostats, sync timing from multiple data sources, and present the data in a useful form, followed by putting this data into a database for further use.

Burbank, CA

Fall 2013 - Summer 2014

Skyline Eco-Adventures

MEMBER OF 5 PERSON TEAM

- Developed prototype of adjustable braking trolley by modeling, testing, and modifying several design alternatives.
- Instrumented each trolley and wrote data analysis code to characterize trolley performance.

Claremont, CA

Fall 2014 - Winter 2014

Extracurricular Activity

PoApper (Developers' Network of POSTECH)

CORE MEMBER & PRESIDENT AT 2013

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

Pohang, S.Korea

Jun. 2010 - PRESENT

PLUS (Laboratory for UNIX Security in POSTECH)

MEMBER

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.

Pohang, S.Korea

Sep. 2010 - Oct. 2011

MSSA (Management Strategy Club of POSTECH)

MEMBER

- Gained knowledge about several business field like Management, Strategy, Financial and marketing from group study.
- Gained expertise in business strategy areas and insight for various industry from weekly industry analysis session.

Pohang, S.Korea

Sep. 2013 - PRESENT

Honors & Awards

INTERNATIONAL

Date	Award, Event	<i>Location</i>
DOMESTIC		
Date	Award, Event	<i>Location</i>
S		
Presentation		
Event		
ROLE		<i>Location</i>
• Description		<i>Date</i>
Writing		
Title		
ROLE		<i>Location</i>
• Description		<i>Date</i>
Program Committees		
Date	Position, Committee	<i>Location</i>