

Lucas Kaiser

Engineer & Experienced Project Manager

Summary

I am a 2010 graduate of the University of Illinois at Urbana-Champaign, where I completed advanced elective coursework in orbital mechanics, spacecraft control, and propulsion while earning a bachelor's degree in aerospace engineering.

After graduating, I worked as a management consultant and systems engineer for major aviation OEMs and their suppliers. I created and refined complex business processes, facilitated communication and visibility between teams, and designed tools to improve progress towards engineering design and testing milestones. If an engineering program was off-course, I specialized in righting the ship.

Experience

Senior Consultant at P3 Group

October 2011 - August 2015 (3 years 11 months)

Management consulting for aviation OEMs and their suppliers, specializing in program recovery through process improvement, budget/schedule management, and tool development for performance tracking.

Instructor at Mathnasium - The Math Learning Center

November 2010 - October 2011 (1 year)

Developed proper math techniques in students from grades 1-12.

Engineering Intern at Christopher B. Burke Engineering, Ltd.

May 2008 - August 2008 (4 months)

Performed flood plain analyses; created hydraulic model designs; delineated watersheds, sub-basins, and tributary areas; and determined excavation volumes as part of a team of professional engineers.

Skills & Expertise

Matlab

Engineering

Labview

C

Fortran

Systems Engineering

Aerospace

Process Improvement

Program Management

VBA
Pro Engineer
AutoCAD
Project Management
CAD
Aircraft
Root Cause Analysis
Inventor
ANSYS
Simulink
Solidworks
Testing
Management
Data Visualization
STK
GMAT
Pro/Engineer
French
Python
NX Unigraphics
SQL
Microsoft Excel
Microsoft Office

Education

University of Illinois at Urbana-Champaign

Graduate Coursework, 2015 - 2015

Grade: A

University of Colorado Boulder

Graduate Coursework, 2015 - 2015

Grade: A

University of Illinois at Urbana-Champaign

BS, Aerospace Engineering, 2006 - 2010

Activities and Societies: Theta Beta Mach Aerosupport Coalition, AIAA, Illini String Orchestra, Fencing Illini
smartly MBA

Languages

English	(Native or bilingual proficiency)
French	(Limited working proficiency)

Courses

BS, Aerospace Engineering

University of Illinois at Urbana-Champaign	
Aerospace Structures	AE 322
Rocket Propulsion	AE 434
Spacecraft Attitude Control	AE 403
Orbital Mechanics	AE 402
Aerospace Propulsion	AE 433
Aerospace Systems Design	AE 440
Rapid Prototyping & Modeling	AE 498RPM
Aerospace Flight Mechanics	AE 302
Incompressible / Compressible Flow	AE 311/312
Aerospace Dynamics	AE 352

Projects

A Two-Dimensional Path Tracking Control Design For A Planar Quadroter

2015 to Present

Members: Lucas Kaiser

Application of linear control theory in MATLAB to design a controller for a two-dimensional path tracking problem

Business Aircraft Completions Management

2015 to Present

Members: Lucas Kaiser

Established a program management office (processes, tools, and KPIs) for a business aircraft interiors program at a Canadian OEM.

Commercial Aircraft Flight Test Program Management

2014 to Present

Members: Lucas Kaiser

Development of governance tools and processes for a commercial aircraft flight test program at a Canadian OEM

Commercial Aircraft Ground Test Rig Management

2013 to Present

Members: Lucas Kaiser

Program schedule improvement and resource management for a commercial aircraft ground test rig upgrade at a Canadian OEM

Oxygen Generator Augmentation

2013 to Present

Members: Lucas Kaiser

Root cause analysis of oxygen generator performance for an aviation tier one company in Germany

Supplier Program Recovery

2012 to Present

Members:Lucas Kaiser

Construction of a "program recovery cockpit", including key performance metrics and automated data analysis tools, for an aviation tier one company in Germany

Supplier Quality Improvement

2012 to Present

Members:Lucas Kaiser

- Re-allocated a \$2 million engineering development budget to
- minimize program delay for an aviation tier one company in the United States

Parts Development Program Launch

2012 to Present

Members:Lucas Kaiser

Established efficient resource allocations, standardized reporting, and a preliminary program schedule for an aviation tier one company in the United States

Detailed Design Program Schedule Management

2011 to Present

Members:Lucas Kaiser

Collaborated with cross-functional engineering teams to define and implement a program master schedule and schedule management process for an aviation tier one company in the United States

L2 Space Weather Monitoring

2010 to Present

Members:Lucas Kaiser

Created a numerical orbit optimizer in MATLAB to define launch windows, delta-Vs, and spacecraft trajectories for construction of a nanosatellite constellation at Earth-Sun L2

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4 people have recommended Lucas

"I had the pleasure of working with Luke soon after his graduation. As a recent grad then jumping into a high intensity project management consulting environment, Luke's structured problem solving ability, attention to detail, and high level of professionalism made him an invaluable asset to the company. His passion for engineering and wealth of knowledge in all things aerospace made working with him a great experience. It would definitely be a pleasure to work with Luke again in the future..."

— **Michael Klopotoski**, *Senior Consultant - Automotive and Aerospace, P3 North America*, managed Lucas at P3 Group

"Luke was a superb employee with exemplary math skills. He was collaborative, always willing to take on new challenges, and eager to learn. Luke was dedicated to his students. I recommend him highly for a position in his chosen field."

— **Erin McCune**, managed Lucas at Mathnasium - The Math Learning Center

"I am the Owner and Center Director of Mathnasium – The Math Learning Center located in Glenview, IL. Luke has worked for us as an Instructor since Fall 2010. Luke has worked with our students ranging from 2nd to 10th grade. He also worked with a wide range of students from remedial to gifted. Luke worked in a small group setting giving a lot of individualized instruction to our students, including one-on-one tutoring with our high school students. Luke is an excellent instructor and has a great rapport with the students. He is very confident in his math knowledge which comes across to his students. He is very patient and understanding with those needing more attention. Luke is committed to being excellent at what he does and is a very motivated individual. I would highly recommend Luke for employment as he has all of the right attributes that employers seek for success."

— **J Steve Santacruz**, was Lucas's client

"Lucas interened for me two summers ago. He was asked to perform engineering calculations and learn computer models for which he did not have a lot of background. I would put Lucas up against 95% of the interns who specialize in my area. He showed tremendous ability to learn, retain and excel. I thoroughly enjoyed having him work here for the summer and know that he will be successful with his abilities and talent."

— **Thomas Burke**, managed Lucas at Christopher B. Burke Engineering, Ltd.

[Contact Lucas on LinkedIn](#)